## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



#### SOME OF THE NEW ROSES.

Rew varieties of roses make their appearance annually with the as a forcing variety, yielding a larger number of flowers than any of the regularity of the seasons. In view of the important improvebest varieties now in cultivation. ments in roses during the last fifty years, as shown by the best of the many varieties originated and introduced in that time, it is not too much to hope that the twentieth century holds in store for the horticultural world, and to be gradually revealed, numberless varieties surpassing in

many respects, those now considered the best. Year by year we are now receiving valuable acquisitions, the result of cross-breeding and hybridizing, and our gardens disclose such beauties in the rose as no previous time ever saw. Not unmindful that many of the varieties produced and introduced eventually fail to be acceptable, still, all rose growers are aware that a substantial gain is accruing.

Some of the latest introductions will at this time be noted as well as the standing of others that have already acquired a reputation. The Hybrid Tea class is one that is of the highest interest, the plants having a hardiness almost equal to that of the Hybrid Perpetuals, while the flowers possess some of the best qualities of the Tea var-

Ohe of the most promising of this class offered to the public the present season is Mrs. Robert Garrett. It is a cross between Caroline Testout and Sombreuil and therefore has a large proportion of Tea blood, possibly too much to make it reliable as an out-door rose at the North, but it has not yet been tested in this respect. It was raised by Mr. John Cook, of Baltimore, a well-known originator of a number of fine varieties. H. Weber Co, of Oakland, Maryland, who appear to be the principal propagators and introducers

of this rose, state that the plant is of remarkably fine habit, hardy and vigorous, with remarkably strong root action. They say "it is continually throwing up great, strong shoots from base of plant, more so than any rose we know of. while it is clothed with an abundance of the richest, dark green foliage, which is always a necessary accompaniment of a first-class rose." The flower is of great depth and size, and beautifully shaped, long, pointed buds, the open flower displaying a beautiful arrangment of petals and beautiful shaded center. The color is described as a rich, glowing, soft pink. It is thought that it will prove of great value

In the Hybrid Tea class, the Dingee & Conard Company, the wellknown rose growers, offer this spring what they claim to be "the first, pure white, hardy, everblooming, climbing rose," under the name of Mrs. Robert Peary. The plant is a sport from the white Hybrid Tea, Kaiserin

Augusta Victoria and was "found growing in the greenhouse of De Voecht & De-Welde, of Wilmington, Del-

Reproduction from The American Florist

THE NEW ROSE MRS. ROBERT GARRETT

aware." From them it was procured and propagated, and is now sent out by the Dingee & Conard Company. The introducers say of it; "it is as hardy as any Hybrid Perpetual or Moss rose, and will withstand, unprotected, the most severe winters." It is evident that this statement must be considered as a prediction, rather than as a fact substantiated. If it shall prove true, then this variety will be a great boon to our gardens. It is further described as a "strong, rapid grower, without a weak spot, growing to perfection in open ground, and throwing up numerous shoots ten to fifteen feet high in a single season." The flower are said to be "extra large, full, deep and double, and are produced on long, stiff stems." The buds are "long and pointed, exquisitely modeled and gracefully finished." Besides, it is deliciously fragrant. Here is a combination of good qualities that indicate a very desirable rose.

A climbing variety, a sport of the same origin as the above, is sent out by A. Dickson & Sons, the Irish Rose growers, under the name of Climbing Kaiserin Augusta Victoria. Described as similiar, in all respects, to the variety from which it originated, except in its

climbing habit. It is now an interesting question whether this variety and Mrs. Robert Peary will prove to be identical.

Ellwanger & Barry, of the Mount Hope Nurseries, of this city, are offering this spring the Climbing Hybrid Tea above mentioned and, also, another Hybrid Tea, from Dickson & Sons, called Countess of Caledon. This variety is described as of vigorous habit, free blooming, with large flowers of perfect form, and of a rich carmiue-rose color. It has been awarded a gold medal by the National Rose Society of England. The Dingee & Conard Company offer this spring, as a new Hybrid Tea, Clara Watson, a rose of English origin, by Prince, in 1893. The flowers are said to resemble Bridesmaid in form, and produced in remarkable profusion. Color, a salmon pink.

Ethel Richardson, the name given in the catalogue of Benjamin R. Cant, the rose grower, of Celchester, England, and Miss Ethel Richardson, of Ellwanger & Barry's supplementary catalogue of this spring, undoubtedly refer to the same variety, as the descriptions correspond, but by the first named firm it is said to be a Hybrid Tea, and by the latter, a Hybrid Perpetual. It is one of A. Dickson & Sons pedigree roses of 1897. Plant of moderate growth, very free flowering, flowers large, imbricated, high center, almost pure white, with pale flesh center.

The French rose grower, P. Guillot, offers this spring a new Hybrid Tea called Adine. It is described as a low, bushy plant, very free blooming: flowers large, full, fine form; color orange-yellow with a ground color of aurora-rose, often mingled with yellow, white and bright carmine, with the undersides of petals deep orange-yellow. A curious variety and very original on account of the diversity of colors on the flowers of the same plant. It has obtained two first prizes and a gold medal at the Exposition of Lyon, France, in 1897.

Ketten Frères, of Luxembourg, offer a new Hybrid Tea, of the name Grossherzog Ernst Ludwig, raised by Dr. Muller. Plant very vigorous, of climbing habit; flowers large, very full, form of the bud and of the flower like those of Maréchal Niel. They call it a Red Maréchal Niel.

Other varieties in this class which may possibly have merit are as follows:

L'Innocence, by Pernet-Ducher. Plant vigorous, very branching, thorns small and few in number, leaves bronze-green; flowers large, full, globular, brilliant white. This variety is derived by a cross of some unknown variety with Madame Caroline Testout, and has some of the qualities of of the latter. Proves to be an excellent forcing variety.

The two following varieties are by the same grower as the above and each was awarded a gold medal at the Horticultural Exposition of Lyon, France. in 1807.

Madame Eugène Boullet. Plant vigorous; thorns few; beautiful foliage of a brilliant bronzy green; bud of graceful form, very handsome when half opened; flower large, cup-shaped, nearly full, color Chinarose, shaded with yellow and bright carmine. A very beautiful variety.

Violoniste Emile Levêque. Plant vigorous and bushy; foliage purplish-green; buds long; flowers medium to large, full and well formed, color a bright blush rose shaded with yellow, with orange reflection inside. Very free bloomer.

The following two varieties are from the French grower, Buatois:

Madame Adolphe Loiseau. Plant vigorous, with smooth, glossy wood, without thorns; leaves a light, shining green; flowers very large, full, often attaining the dimension of Paul Neyron; color a handsome flesh-tinted white.

Madame Paul Lacoutière. Bud very long; flower large, semi-double, a coppery saffron yellow, center golden yellow, border of petals lightly shaded with carmine, very fragrant. Plant vigorous; foliage brilliant deep green. The flowers come either singly or in cluster of three to six. This plant is the result of a cross between Ma Capucine and Baroness Rothschild.

Souvenir de Madame Gaston-Menière, produced by Veuve-Schwarz. Plant vigorous; flowers very large, finely formed, full, produced singly; color bright red, center and reverse of petals deep coppery red. A very beautiful variety, and extremely free flowering.

Some other varieties of Hybrid Teas, by different growers, and which are offered this spring by Ellwanger & Barry, are the following:

Antoine Rivoire. Flowers large, rosy flesh on a yellow ground, shaded with bright carmine.

Beauté Lyonnaise. White, tinted with pale yellow.

Grand Duchess Victoria Melita. Creamy white, with light gold center. Gruss an Teplitz. Brightest scarlet crimson.

Madame Cadeau-Ramey. Rosy flesh, shaded with yellow at the base, and bordered with rosy carmine.

Madame Jules Grolez. Beautiful China rose color.

Mademoiselle Alice Furon. Yellowish white.

Mademoiselle Helena Cambier. Color varying from rosy flesh to salmon or rosy copper.

Rose buyers will perceive that they are offered quite a considerable number of new varieties of roses of a very important, beautiful and interesting class.

Turning our attention now to the class of Hybrid Perpetuals, or Hybrid Remontants, we find here some which are of recent introduction, and as yet unfamiliar to the public. Prominent among these is Marchioness of Londonderry, undoubtedly the best white remontant rose. The plant is vigorous, with handsome foliage. Flowers very large and of perfect globular form, petals of great substance, shell-shaped and reflexed; color

ivory white; very fragrant. This rose has been awarded a gold medal by the National Rose Society of England, and has also been tested several seasons in this country, and has fully established a reputation as the best pure white Hybrid Perpetual. This rose and the two following, all of which were noticed last year in these pages, were originated by Diekson & Sons, of Ireland, who have sent out many fine roses, among them being Margaret Dickson, which has already acquired wide popularity.

Mrs. R. G. Sharmon Crawford. Plant of vigorous growth and strong branching habit, making long shoots, each bearing a large, handsome flower of perfect form, imbricated; color a deep, rosy pink, with outer petals shaded with pale flesh; very fragrant; blooms all through the summer and late into autumn. A gold medal rose.

Tom Wood is another fine Hybrid Perpetual of A. Dickson & Sons. Of vigorous habit, branching freely and almost a continuous bloomer from early summer to late autumn. Flowers very large, full, and finely formed; color cherry red, petals large, shell-shaped and of great substance.

Robert Duncan is still another new and splendid rose by the same growers. Plant vigorous and an abundant bloomer. Flowers large, of perfect form; color a bright rosy lake.

Rev. Alan Cheales is a new English variety of Hybrid Perpetual which has already made a reputation. Plant vigorous and free blooming. Flowers large, pæony-shaped; color pure lake, silvery white reflections.

Waltham Standard. This new Hybrid Perpetual, of Wm. Paul & Son, England, is being offered by Ellwanger & Barry together with other varieties of recent introduction. Plant of vigorous growth and fine foliage. Flowers brilliant carmine, shaded with scarlet and violet, opening flowers very vivid in colors, very fragrant.

Clio is another of Wm. Paul & Son's varieties sent out a few years since, and which has made a fine reputation, but as yet has been little little disseminated in this country. Plant vigorous, and a very free bloomer. Flowers very large, of fine globular form; flesh color, shaded in the center with rosy pink.

Two recent varieties of Cooling & Sons, Bath, England, are now offered in catalogues of American growers; these are Bladud, with large, full, globular flowers, having outside petals silvery white and pale blush pink center.

Laurence Allen, a plant of early and free blooming habit. Flowers large and full, color clear soft pink with lighter shading; plant vigorous and hardy

Haileybury was sent out in 1896, by Paul & Son, of Cheshunt, England. Described by them as very vigorous and perpetual; color cerisecrimson. Given an Award of Merit by the Royal Horticultural Society.

Panachée de Bordeaux, a French striped variety. Plant very vigorous, flowers very large, color bright rose, shaded with velvety red, streaked and striped with white, fragrant and showy.

In Tea roses the new productions are always more numerous than those of any other class, and the present time is no exception. As most of these are of foreign origin, and their true merits can only be known to us after trial here, only those will be mentioned that have some particular claim, or that have been taken up and are now offered by some of our own rose growers.

Of particular interest in connection with the prospective young Queem of Holland is the Sweet Little Queen. This is sent out by Soupert & Notting. The followinging is the originators' description: "Plant vigorous, beautiful, smooth, green foliage; bud long, flower very large, full, of handsome form, outer petals large, those of the center narrower; color shining narcissus yellow, the center ochre yellow mingled with auroral red and bright orange yellow. The petals are pointed, like those of a chrysanthemum, giving the flower a very particular stamp. Color and form new among Tea roses. Excellent variety for forcing. Variety beyond comparison." This rose received a gold medal at the Exposition of Brussels in 1897. Let us hope that the Sweet Little Queen may realize the expectations of rose lovers.

The reproduction of varieties like in all respects to their parents except in color, is to be noticed in White Maréchal Niel, White Maman Cochet, White Papa Gontier, and White Bougère, all recent gains. Grossherzog Ernst Ludwig, a new German variety from Maréchal Niel, is called Red Maréchal Niel.

Empress Alexandra of Russia is a new Tea of Wm. Paul & Son. This is their description: "An exquisite new rose of a novel and taking shade of color. Buds bronzy salmon, open flowers rich lake red, shaded with orange and fiery crimson, very large, full, and globular; of vigorous growth and of extraordinary freedom in blooming, the flowers presenting a splendid effect both on the plant and when cut. A gorgeous decorative rose, quite distinct, both in color and habit, from any rose hitherto introduced. Has received various certificates and awards. The English horticultural journals speaks very highly of it.

The following three varieties are Tea roses from the same growers:

Enchantress. Creamy white, with buff in center, large, full and globular, petals slightly recurved at the edges. Plant vigorous. Fine for pot culture and late autumn and winter blooming.

Sylph. Flowers ivory white, finted peach, center creamy pink; large, high centered; growth vigorous; flowers produced in great abundance.

Zephyr. Flowers sulphur yellow, changing to nearly white as they expand, large, full, cup form, very free and elegant; vigorous. The two last are considered very hardy for Tea roses, having borne winter exposure much better than others of this class.

Grazilla is well mentioned by the Dingee & Conard Co. Flowers creamy white, shaded with faint black.

Muriel Grahame is a sport from from Catherine Mermet and is similar to it except in color, which is pale cream, faintly flushed with rose.

Pierre Guillot sends out two new varieties this spring which probably are meritorious. These are as follows:

Madame Réné Gérard. Flower large, full, deep copper yellow, strongly shaded with nasturtium yellow.

Souvenir de J. B. Guillot. Flowers varying from nasturtium red shaded with crimson to clear nasturtium red, according to the temperature. Color very brilliant and new.

Lovett, of Little Silver, N. J., sends out a Tea rose under the name of Priscilla, a variety derived from Maman Cochet, and for which is claimed more than usual hardiness. Flowers are described as very large, pure snow white, very fragrant.

From Mr. Luther Burbank, of Santa Rosa, Cal., comes what he calls a Bourbon Tea, called Santa Rosa, a cross of Hermosa with a seedling of Bon Silene. Flowers rich shell pink, inclining to crimson; full, double, reflexed petals. Plants grow in rather compact bushy form. The originator speaks of its "Reckless habit of blooming at all seasons."

In regard to other new varieties, a few brief notes must now suffice. Dingee & Conard Co. offer a new variety of their raising under the name of Ever-Blooming Prairie Queen. In answer to inquiries made of them, the following information, in regard to this rose, and the Empress of China, which they sent out a few seasons since, was received in a recent letter:

"Ever Blooming Prairie Queen is an introduction of ours, and is a cross between Mrs. De Graw and American Beauty. The fact that it resembles Prairie Queen in wood and flower, habit of growth and

hardiness of flower, makes the name Ever Blooming Prairie Queen eminently fitting. Empress of China seems to be a variable rose; with us it produces a wonderful crop of flowers late in May and continues to produce flowers off and on throughout the entire season. It seems to be as popular as ever, and the demand in no way decreases, and many people have splendid success with it. On the other hand, there are are those who have not succeeded with it. We believe, however, that its hardiness and freedom of growth, together with the tremendous crop of flowers, that it is bound to give at some time, makes it stand at the head of good roses."

Two climbing roses which are now to the front deserve notice:

The first of these is the Japan Multiflora which makes a plant eight to ten feet in height, very bushy, and with drooping branches, and producing thousands of small, single, sweet, white flowers, followed by brilliant red berries. It is very hardy, all over the North, and passes unharmed our severe winters. It appears that this rose was brought from Japan nearly a century ago, but until recently has been passed comparatively unnoticed.

The other variety is the Dawson, a cross between the Japan Multiflora and General Jacqueminot. Plant a stronger grower than the Multiflora. Flowers large, full, of a bright carmine color and highly fragrant, and

followed by bright red berries. Fine for training over balconies or trellises. Very hardy. It was produced in Boston many years ago, by by Jackson Dawson.

A pink Wichuriana, called Mrs. Lovett, is offered by Lovett, of New Jersey. His own description of it it is as follows: "Like many of our best flowers and fruits, it is a natural hybrid; the parent plant being situated contiguous to a number of our best hardy roses. In every respect it is a true Wichuriana, save the flowers—in habit of growth and foliage, hardiness and abundance of bloom, it is identical with its parent; but its roses are very double, two to two and a half inches in diameter, and are of the loveliest and most cheerful bright, rosy-pink imaginable. Best of all, it is as fragrant as American Beauty."

A number of promising hybrid dwarf Polyantha roses are offered. From Soupert & Notting comes Archiduchesse Elisabeth-Marie. Plant vigorous, blooms in corymbs; flowers medium, full, imbricated, yellowish and yellow shades; very fragrant, and free blooming. Fine for masses and

for pot culture. A new color among Polyanthas. A cross between Mignonette and the Tea variety, Luciole.

Ma Fillette is another from the same growers and having the same origin. Plant low and bushy, blooms in corymbs; outer petals large, of a peachrose color on yellowish ground, those of the center narrower and of a shining carmine-lake, with auroral reflections. Very fragrant and free bloomer.

La Prospérine, by Ketten Frères, is a cross between Georges Schwartz and Duchesse Marie Salviati. Plant vigorous; flower medium size, sufficiently full, with long stem; color peach red, with the center tinted with orange chrome yellow and the center passing to rosy white; very free blooming. Good for cut flowers.

Of pure Polyanthas, notice should be taken of Lilliput with small, rosette-shaped flowers in clusters; color bright cerise-carmine flushed with crimson. Plant dwarf, free blooming, perpetual.

Mosella. This has small, yellowish-white flowers, very full, imbricated and produced in clusters.

Perle des Rouges. Flowers small, double, produced in clusters; color deep, velvety crimson. The deepest and richest color among Polyanthas. Blooms abundantly, and until late in the season,

ROSE, MARCHIONESS OF LONDONDERRY

Varieties of Rosa rugosa are multiplying. We notice the double white Rugosa, Blanc Double de Coubert. Flowers pure white, double and fragrant.

Rose Apples. Flowers large, semi-double, color a soft carmine rose; blooms in immense corymbs during summer and autumn.

Souvenir de Pierre Leperdrieux. Plant vigorous, handsome foliage, abundant fruits. Flowers double, in clusters, color bright vinous red.

A word, after another winter's experience, in relation to the Hybrid Tea Polyanthas. It is probable these will come largely into use at the North for bedding. Clothilde Soupert and Pink Soupert have proved to be able to stand the winter with such protection as may easily be given.

In closing this brief review of some of the latest and best acquisitions of roses, it may be remarked that the great activity at present among rose growers must be apparent to all; and this activity results in a large measure, no doubt, from the great interest in roses and their popularity at the present time by the general public, and old as is the cultivation of the rose, this Queen of Flowers has never, than now, in all the ages, been held in higher esteem.

#### ROSES FOR ALL SUMMER.

IT IS easy to have roses during the month of June, while the rose-tide is fully on, and in many a quaint, old garden, the first harbinger of the rose season, following close in the wake of the Iilacs, is the old-fashioned Yellow Briar, just as beautiful today, in its wealth of glittering gold, as it was in days of yore,—those quiet, peaceful days when the fragrant Sweet Briar and the spicy Cinnamon rose held so warm a place in the heart, and so large a space in the garden. These, with the Scotch Briars, were early bloomers and very hardy. As their season began to wane, the Provence and the dark velvety Damask, with other hardy June roses, took up the thread in the lovely, rose-hued woof of June and

ment, the plants of this class of roses will make a surprising growth of wood and yield the same proportion of noble flowers. Added to this, the branches must be kept well cut back; remove all wood that does not show strong, healthy buds. It is sometimes necessary to cut back to two or three eyes before a bud is reached from which we may expect a new growth. When branches are developed from such buds they will almost always bear roses, but not with the freedom, during late summer, that they displayed in June and July.

Another way of inducing bloom: All who have carefully grown roses, have no doubt observed that the flowers are produced on the ends of the branches, only a few inferior ones being borne on the lateral shoots. In

the axil of each leaf is a latent or undeveloped bud. If the long, strong shoots are pegged down close to the ground, and kept so, each latent bud will produce a new shoot which, according to the established rule in rose culture, will produce a large number of blooms. The branches are easily held down with wooden hooks cut from the woods or from limbs taken from fruit or shade trees in pruning time. These pegged down branches will flower continuously and will also form well-ripened wood which, in its turn, may be treated in the same way the next year. This latter plan is especially valuable for Bourbon and for Hybrid Perpetual roses, insuring a continuous display throughout the season, if the work is properly done.

No plant has more foes than the rose; rosechafers, beetles, worms, and aphides attack them, and if not met with prompt measures, they soon ruin the prospect of a rich rose harvest. It is altogether wise to anticipate their coming, and early in the season, before any are to be seen, to dust the foliage, both above and below, with powdered hellebore, using a bellows or powder gun for the purpose, and applying it while the foliage is wet with dew. This early application is, in every sense, "the ounce of prevention worth a pound of cure." Tobacco tea or tobacco dust will free the bushes from green aphis if applied thoroughly and in time. Cold water turned on with force, by means of a hose, thorougly applied from all sides, sweeps many of them from the bushes. The rose-slug, a slimy, worm-like pest, sometimes infests the bushes, eating the green substance from the foliage, and if not exterminated, soon robs the bushes of their beauty, and the roses of their support. This pest may be destroyed by tobacco dust, or in fact any of the insecticides, or anything obnoxious in dust form. Owing to their slimy nature, it adheres so successfully that they are unable to free themselves from it, and succumb to its effects in a very short time. An application of tobacco tea soon settles them, but it is not so easily applied.

A list of choicest Hybrid Perpetuals will be found in the following, and amateurs may feel assured that they embody the most reliable bloomers and choicest array of color. They do finely planted in May, and when pot-grown may be planted as late as the middle of June. While we may not expect the latter to yield flowers the same year, they will be in fine condition, with proper cultivation, for the next. There is not a second-class rose in those enumerated, and any-

From Colored plate in Die Gartenwelt

ROSE, THE SWEET LITTLE QUEEN (OF HOLLAND)

wrought their beautiful mantle over many a riotous mass in tangled nook and corner. But their season was all too brief, and, once it was closed, a long twelve months must needs roll by before roses came again.

The Hybrid Perpetuals of our gardens have opened up a more enduring field of beauty; and while they do not bloom with the constancy of the Tea roses, they are more imposing while they do bloom.

Culture is all in all with these roses. A Hybrid which, in common garden soil, is left to shift for itself, may perhaps never yield more than its June crop of flowers; but keep the soil well enriched—it cannot be too rich—keep it stirred and mellow, and do not allow the plant to stop growing, and note the result. This is the only way to bring out the good points for the flowers are formed on the new wood. Given a well-drained bed, from eighteen inches to two feet deep, under above treat-

one not prepared to try a bed this year, will find the list well worth preserving for reference in early spring.

MARGARET DICKSON heads my list. The first rose mine bore was in six weeks after planting. The plant was composed of two shoots cut back to a couple of eyes, and the flower appeared nearly as large as the plant. It caught the eye of everyone who chanced to be near it. It is a magnificent rose in size, and I confess my curiosity overbalanced my judgment in allowing it to bloom so young. Nearly as large as Paul Neyron, and its form most beautiful; the petals charmingly reflexed, and of the greatest substance; large, heavy, and waxen, and pure white with just a hint of blush at its center; very fragrant also, it is easily the most beautiful white Hybrid Perpetual.

VICK'S CAPRICE is both rare and beautiful. The flowers are large,

and a soft shade of pink with the sheen of satin. Added to this, they are striped and dashed, with both white and carmine in the most unique and charming manner. It bloomed continuously for me throughout the first summer after planting. The buds are especially beautiful, being long and pointed, and showing the same capricious colorings as the expanded flower, making it a lovely rose for cutting.

MRS. JOHN LAING is one of the very best. A clear, shining pink, with heavy, waxen petals, delightfully fragrant, and one of the most

free bloomers.

PAUL NEYRON is a mammoth in size of flower, a rich glittering pink, finely scented, and considered the largest rose grown.

MADAME PLANTIER, though not a hybrid perpetual, is the type of hardiness in a rose. It is a very profuse bloomer, with flowers beautifully formed and very double. One of the very best for exposed localities.

PERFECTION DES BLANCHES and Coquette des Blanches are of a lovely creamy white, faintly tinged with blush, slightly fragrant, medium size, but blooming in large clusters and continuously throughout the season, even the first year.

old favorite, and a great bloomer as well as a great beauty. One of the best. AMERICAN BEAUTY is one of the largest and the most beautiful of the hardy roses. Its form and coloring are exquisite; a rich rosy crimson, beautifully shaded and veined. It is a strong

GENERAL JACQUEMINOT, a deep, velvety crimson, is an

tinuously. ANNE DE DIESBACH is a brilliant carmine, with beautiful buds and deliciously sweet.

MADAME CHAS. WOOD is a rich crimson, shaded maroon; its flowers large, full and fragrant. It blooms early and all through the season.

It is a fine bloomer.

MAGNA CHARTA, rosy red flushed with violet.

PRINCE CAMILLE DE ROHAN deep velvety crimson changing to deep maroon and apppearing black at a distance.

or June, in rich mellow soil, and given good cultivation, will begin to bloom soon after planting and continue until the approach of cold weather. These plants are sold so cheaply that a small outlay insures a supply of beautiful roses of most delicious sweetness for all summer. An eastern exposure seems to suit them best, when grown in the open ground, and no location is better than an east porch when they are grown in pots. When setting them in beds, if a quantity of coarse or refuse tobacco is worked in

freely about their roots, it greatly aids in keeping at bay the grub-worm or larvæ of the May beetle that

proves so destructive to the tender roots. Keep the

soil well stirred that the plants may grow thriftily, keep free from pests, mulch in dry weather, and do

not permit the fading flowers to remain on the bushes. When all the flowers on a branch have bloomed, cut it back to a strong eye and another branch will start at once and soon be blooming. This constant cutting back to induce new growth is the key to plenty of roses. The amateur who hesitates to use the pruning shears or knife as required will reap a light harvest of bloom.

Among the following will be found roses of the choicest forms and colorings, with sturdy habit and free-blooming qualities: Marie Guillot is loveliest of all among Tea roses, and my favorite; creamy white with center of palest lemon, with grandest form. Others very beautiful, sweet, and desirable in every way are Duchesse de Brabant, Marion Dingee, Francisca Kruger, Coquette de Lyon, Perles des Jardins, Madame Hoste, Madame Welche, Madame Lambard, Catherine Mermet, La Princess Vera, and The Bride.

Try also those charming Polyanthas, Clothilde Soupert, creamy white and flushed with palest rose, and Pink Soupert, pure shining pink, and you will have roses the year round.

MRS. A. H. HAZLETT.

#### SEED PODS.

The first white frost after many weeks of warm, showery weather, came to sadly befool luckless blossoms on the morning of April 1st. It withered the purpling wistaria catkins, the tenderer hyacinths and narcissi that were yet in bloom, mowed down the efforts of too early vegetable gardeners, and played sad havoc with the fruit buds.

The verbenas are a faithful, long blooming race that is not half appreciated. Some young plants placed in a coldframe with pansies last fall, out-bloomed the latter from first to last, and people who seemed to care little for royal purple pansies would clamor loudly for the scarlet verbenas. Once, when the cold crept in and killed the pansy buds, the verbenas did not seem to mind it at all.

An extravagance of last year that has given me much pleasure during the past month was a good collection of hardy narcissi. One of the loveliest of all the Trumpet section is N. moschatus, not mentioned, I am surprised to find, even by Ellwanger in his enthusiastic chapter on

> might not be the same as Ellwanger's N. cernuus. A large planting of tulips was poorly dug last June, and later the field was sown in wheat. Early this spring, when the wheat was greening brightly, up came the scarlet and creamcolored cups of Duchess de Parma and Cottage Maid. A prettier effect than their irregular lines and masses of color made

daffodils. It is nearer to pure white than any trumpet in my collection. I have been wondering if it

> could hardly be imagined, yet I shall choose more careful laborers for the bulb harvest this

year.

We have along the banks of streams an oxalis, O. violacea, that I have never seen in cultivation, yet which is exceedingly pretty. The flowers are larger than those of O. lasiandra or O. Deppei, borne in loose clusters, and the color is a lovely lilac-blue. The leaves are thick, dark green, and heavily zoned with purplish-red. It is a very free blooming little plant, much prettier

have been thinking what a beautiful contrast it would make for Bermuda Buttercup if it could be coaxed to bloom in winter, and shall experiment to see if it will yield

to persuasion of this sort. The little bulbs are perfectly hardy here; whether they would be hardy further North of course I cannot say.

The thorough spring cleaning of a large country yard is much more and harder work than most people imagine. The March winds sweep the dry leaves into deep shoals where the grass is long enough to catch them, and to rake them away is like combing a child's tangled hair. If any grass at all grows under pine trees and the owner wishes to keep it fresh and green there, the "combing" becomes, in such spots, a very aggravated case. Pine needles do not disfigure a yard as other leaves, but they sift down into a thick, close mat that

completely smothers the grass. I love the pines for their plumy, evergreen majesty, and their soft, ceaseless forest song, but I think my ancestors were hard upon me when they planted five white monarchs in a wide middle space of this yard. A moral that I have drawn from this last week's hard work is to have my yard mowed as closely as possible

The forsythia, cydonia and spiræa are treasures among bright, lavish blooming, early flowering shrubs, so I should say that each genus was the very best of its color, shining from a long distance in the chill spring weather, like sunshine, fire and snow respectively. But each of these shrubs seems to "want the earth" for its portion. How shall we keep them from spreading, except by a vigorous use of the grubbing-hoe? The forsythias are great golden mounds of downward sweeping branches that root like blackcap raspberries, wherever their tips touch the ground. VanHoutte's spiræa is aggressive enough to send up its white plumes



METEOR The popular dark colored Hybrid Tea

even from the midst of the thorny, burly cydonias, and these, in turn, send up suckers for yards around the parent bushes. The plant-beggars have helped me to partially solve this problem: Every spring troops of them come for all the shrubs, vines and roses that they can carry away, and I put them to sprouting among the shrubbery. Perhaps nature is a foster-mother of benevolence.

VICKS ILLUSTRATED

To depend upon plants to reproduce themselves from seed is doubtless slipshod gardening, yet from such "volunteer" seedlings we often have our most vigorous plants and earliest flowers. Seedlings from double sorts always degenerate, so we never pay any attention to them, no matter how sturdy they look. But verbenas, salvias, single petunias, Phlox Drummondii, browallia, cosmos, and other plants of this class we take up and carefully transplant to our "early" beds. I did not know that nasturtiums could be depended upon to reproduce themselves in this way until the last few years. A tall paling fence has been covered with the climbing varieties for several summers. Every year, close under the shadow of the palings, the plants come bobbing up in a brave way that becomes the soldier flower. This year they were up as early as March 25th, yet I think that with the friendly shelter of the palings late frosts will hardly injure them. This practice of taking up and transplanting volunteers for early flowers amounts to about the same thing as sowing annuals of this sort in September and wintering them over, a practice common with expert gardeners. We merely take advantage of a kindly climate and nature's sowing of the seed for us. Sometimes when the winters are long and severe the volunteers fail, so we always provide ourselves with enough carefully saved seed for an emergency.

L. GREENLEE.

#### \*\*\* ROSES IN POTS.

HERE are few plants that the amateur is more anxious to grow, and few so desirable, as a nice rose with a few handsome flowers and healthy foliage, and yet rarely are they seen in the greenhouse of the non-professional or in a house where there is a mixed and varied collection. This is largely due to incorrect methods of culture and the attempt to grow sorts or varieties that are very unsuitable for pot culture.

It can be asserted that in a greenhouse where a variety of other plants are grown, there is no difficulty in forcing roses in pots, and with proper management, a succession of bloom can be had from early February till roses bloom outside. The amateur must never, unless he has the facilities, expect to rival the commercial florists in his continuous production of Tea and Hybrid roses. They plant them in beds or on benches in June, commence cutting in September, or latest in October, and the plants grow and flower continuously, but they are thown out the following June to make room for another planting. These are the beautiful but delicate Tea roses; they are evergreens and do not flower with a burst of bloom as do the Remontant, or so-called Hybrid Perpetuals, but grow and flower continuously. It is a science to grow them, for temperature, ventilation, moisture of the atmosphere and watering, must be closely watched, and, above all, it is a never-ending fight against their parasites, the aphis, red spider, etc. Those who want a few pot roses in the greenhouse should never attempt to grow any of this class; even if kept fairly healthy, the few buds you would get, and those at intervals, would be no attraction. The roses with which you can be entirely successful are the large, brilliant and sweet-scented Hybrid Perpetuals, and a few Hybrid Teas, which if they are not a direct cross between the Hybrid Perpetuals and the Teas, have at least some hybrid blood in them. I allude to the magnificent La France and the very recent introduction, Souvenir du President Carnot, which has proved a poor varietiey for midwinter, but a magnificent spring and summer rose, and grandly adapted for a pot rose. Some of the Hybrid Perpetuals grow well on on their own roots and some of the finest do not. General Jacqueminot, crimson; Madame Laffay, deep rose; La Reine, deep pink; Ulrich Brunner, a grand pink; Coquette des Blanches, white; Madame Plantier, white; Jules Margottin, cherry red; Marie Bauman, ruddy red; Souvenir du President Carnot, white, creamy pink tinge; and the gorgeous La France, silvery rose; any of these grow finely on their own roots, that is, propagated by cuttings in the usual way. The following is a short list of very choice varieties that do better when budded on the Manetti stock and which you would have to purchase from the nurserymen after they had made a good strong growth. Captain Christy, delicate pink; Dinsmore, scarlet crimson; Madame Charles Wood, rosy crimson; Paul Neyron, deep rose; Magna Charta, clear pink; Baronesss Rothschild, very light pink; and Mabel Morrison, almost white, faint blush.

If you have in your garden a rather heavy loam that has been cultivated with other crops, you can purchase small plants of those varieties recommended to grow on their roots, and plant them out early in May,

about eighteen inches apart. If they have but one leading shoot, you should pinch out the top, which will induce several growths to start from the base. Select three or four of the best growths and rub off the others. By the middle of October they will have grown two to three feet high, with stems as thick as a lead pencil. Now is the time that the most important operations begin, and whether you have grown them yourself or must purchase them of a nurseryman, from the middle to the end of October is late enough to receive and pot them. If you purchase them insist that they be American grown; almost millions are imported every fall, but the long time on their journey and further time in their distribution, render them unfit for pot culture, at least the first year. By end of October the early frosts will have ripened the wood and prepared the leaves to drop, or they can be readily potted off, which they must be in lifting. Pot in five-, six- or seven-inch pots, as the size of the plants and roots require, but a larger pot than necessary is no advantage, and also unsightly; pot firmly and use good turfy loam, with a fifth of half-rotten manure. Either before or just after potting, whichever is more convenient, cut out weak shoots and shorten back the strong growths to four or five plump eyes or buds; this should leave the top of the shoots not over seven or eight inches above top of pot. If you have four shoots to the plant, and each one gives four more, each bearing a rose, you will have plenty of rose buds; the fewer eyes you leave the stronger will be the growth and larger the flowers; the more eyes you leave the more flowers you may get, but they will be shorter stemmed, weaker and smaller. There is only one place for them after potting till they are brought into the greenhouse, and that is a coldframe, which is easily made with a few boards and some hotbed sash; a frame six feet wide and any desired length is most handy to attend; two feet deep at back and eighteen inches in front is about right. The pots should be plunged to the rims in some material, - coal ashes, tan bark, spent hops or dry leaves, either will do; this keeps the soil from drying out on warm days which occur in November, and extreme freezing on the cold days of December and later. A thorough watering should be given as soon as potted, and at intervals as necessary until real winter sets in. No sash need be put over the plants until hard freezing commences, usually about the end of November. Whenever warm days occur, even in mid-winter, always remove the sash or give plenty of ventilation, as a few days of warm weather may start a premature growth to be followed by hard freezing, which would be very injurious to the future welfare of the plants.

A banking of stable litter or leaves outside the frame is of the greatest benefit,—it prevents extreme cold from penetrating the soil in the pots, and an inch or two of dry leaves on the surface of the pots when the sash is put on is also desirable, but don't smother them. A little frost to the tops is of no harm, rather a benefit, as it is about following nature's treatment. I have treated at some length the care of roses in the coldframe, but not too much so, for really this is all there is to being successful. It is laying the foundation, which if not sound and correct all your future care, however learned and wise, will be futile.

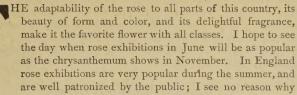
Now we know spring comes along gradually, and to treat these roses correctly would be to bring them from the coldframe into a temperature of 40° at night and in three weeks remove them to the house in which they are to flower, where a temperature of 55° is maintained; but the amateur has often but one house and that is made to serve all purposes; yet there is generally a warm and cold end to every greenhouse, so start them as cool as possible. As spring advances they will feel less the change from the coldframe to the warm greenhouse. If you have only one temperature, and that is 50° at night, you will be all right providing you don't attempt to force them too early. They should be syringed daily from the time they are brought in, to keep away red spider. All roses are sadly troubled with aphis, or green fly; if the greenhouse is attached to the residence furnigating is out of the greenhouse. attached to the residence fumigating is out of the question, and to prevent or destroy aphis you must syringe the plants once a week, or better still immerse them in a tub of water and nicotine for a few seconds; this "nicotine" can be purchased of any seedsman and 200 parts of water to one of nicotine is strong enough, - don't mistake me, the proportion is 200 to I; it does not disfigure or hurt the foliage in the least.

Mildew is the greatest enemy of the rose grower, but occurs mostly in a high temperature and is more troublesome to the Teas than the sorts we are discussing. A draft is most conducive to mildew, simply because it weakens the vitality of the plant, and the fungus, ever ready, finds a resting place; don't leave end doors open, or if you have bottom or side ventilation don't use it till the warm days of May.

Bring into the greenhouse the first batch of roses not sooner than Jan-1st, and let those be Jacqueminot, Ulrich Brunner, La France and President Carnot, and at intervals of two weeks bring in a few more. As the season advances they will take less time to come into flower, and will be naturally the most successful. Don't think for a moment that a rose cannot be grown in a greenhouse most successfully with other plants,—it can, and the writer has seen it done many times and helped to do it. To have roses in pots in flower in mid-winter, say January, more heat will be required.

WM. Scott.

#### CULTURE OF OUTDOOR ROSES.



we could not make creditable exhibitions here. The cut flower roses are unequalled and they may be procured in all the middle and northern parts of the country from June to November and for a longer period at the south. To grow roses successfully, a rich soil must be provided, a heavy, rather stiff yellow loam being the best, and which should be well drained. If the soil is not of this nature it should be removed to the depth of one and one-half feet and filled in with three-fourths good loam from an old pasture and one-fourth well rotted cow manure, well mixed. The rose bed should be exposed to the full sun from morning till night; don't attempt or expect to grow good roses under the shade of trees or near enough for their roots to come in contact with the bed. I never

like to plant rose bushes nearer than twenty or thirty feet to shade trees, for if they are planted much closer the roots of the trees will surely take from the soil that which is beneficial to the rose.

If it is not convenient to have a rose bed, the plants may be grown singly on the lawn, or a row may be planted along a driveway or walk. When so planted, dig out a piece of sod about fifteen inches in diameter, and make a hole about the same depth; prepare it as described above for a bed. In this way the plants should stand about four feet apart. If immediate effect is desired, or blooms from spring until frost the first year, good strong two or three year year old plants should be procured and set as early as the soil can be put in condition in the spring, although I have seen plants do well planted as late as June 15th, but planted this late they must be pot grown. Be

sure to firm the plants well in the soil and water thoroughly after planting. As to varieties, we have many that are very beautiful, monthly bloomers and hardy in this section. If I were confined to but six varieties, I should name the following in their order: Kaiserin Augusta Victoria, creamy white; Madame Caroline Testout, beautiful satin pink; Meteor, crimson; Clothilde Soupert, white, shaded pink; Belle Siebrecht, dark pink; American Beauty, rose. However, there are many other varieties that should be in every collection of any extent, such as Souvenir de Wootton, La France, President Carnot, and several other Hybrid Teas. President Carnot is a new rose of decided merit, and I have every reason to believe it will rank with our very best roses for outdoor culture; the color is a delicate shade of pink that would delight the heart of anyone; its long pointed buds, and handsome, strong foliage make it one of our most valuable roses.

Climbing roses should not be neglected, for there are places around every suburban home where such climbers can be used to advantage. The Crimson Rambler is perhaps the finest and most showy climbing rose to date and should be planted wherever a climbing plant is needed. A strong two or three year old Crimson Rambler in full bloom is a sight long to be remembered.

One of the most troublesome pests of the rose is the "rose slug"; the best remedy I have found is to dust the plants with powdered white

hellebore, in the morning when the dew is on; or if no dew, first spray the leaves and then apply the powder. Another troublesome insect is the green fly, which usually attacks the young growing shoots, and is easily prevented by the use of tobacco dust, which should be dusted over the plants once or twice a week; however, it would be best to make both these applications before the insects appear. In very dry weather the plants should be thoroughly watered two or three times a week, and hoed at least once a week. Never allow the soil to bake or become hard; the surface should be kept loose at all times. W. W. Coles.

# \*<sub>\*</sub>\* CRIMSON RAMBLER ROSE.

THE new climbing roses, introduced in recent years, are all valuable additions for outside decoration. But the idea of using a climbing rose for a pot plant and for forcing is not quite old, and certainly a lucky one in several respects. For this purpose the Crimson Rambler has been chosen, and on account of its splendidly vivid color and the adaptability to be tied up to a specimen of almost any shape and size, it gives us an entirely novel addition to the variety of flowering Easter



Grown by Julius Roehr, Rutherford, N. J.

CRIMSON RAMBLER AS A POT PLANT

plants in habit, and especially in color, that will not be excelled for some time to come. Mr. Julius Roehrs, of Rutherford, N. J., had a houseful of Crimson Ramblers in bloom before last Easter, but not after,—there were none left over. The fact is that every florist that came in sight of that particular house was struck with the novelty of color and extraordinory beauty and showiness of the plants. This rose is quite as easy to handle as Magna Charta or some of the other hybrids suitable for forcing. Of course forcing for April flowering, which is meant here, is not quite so difficult as winter forcing. Like most other plants used for forcing, this rose has to be prepared especially, according to its habits and requirements, before it is taken to the house where it is to receive the last touches of the poor florist's rich heart. He may succeed the second year if not the first. As this rose is a vigorous grower, it should be kept in pots during the summer preceding the forcing season, plunged outside in beds which are mulched with cow manure and watered plentifully. When the growth is completed, in October or November, the pots should be lifted out of the ground, moderately dried out to ripen the wood and stored in a suitable place. Taking the plants in hand for forcing, the thin, useless wood should be cut out and the strong growth tied as desired, and taken into a house which can be kept at 45° to 50° nights for the first three or four weeks. When the plants commence to grow they should be kept about 55° nights, or very little more, until they bloom.

V. Faus.

#### MAGAZINE ILLUSTRATED MONTHLY....

ROCHESTER, N. Y., JUNE, 1898

Entered in the postoffice at Rochester, N. Y., as second class mail matter.

CHARLES W. SEELYE, Editor.

ELIAS A. LONG, Associate. Formerly conductor of Popular Gardening

Publishers are invited to use any articles contained in this number, if proper credit is given.

VICKS ILLUSTRATED MONTHLY MAGAZINE is published at the following rates,

either for old or new subscribers; these rates include postage:
One copy, one year, in advance, Fifty cents. One copy for twenty-seven months (two and one-fourth years), full advance payment, One dollar.

A Club of five or more copies sent at one time, Forty cents each, without

premiums. Neighbors can join in this plan.

FREE COPIES. One free copy additional will be allowed to each club of ten (in addition to all other premiums and offers), if spoken of when club is sent. contributions, subscriptions and orders for advertising should be sent to VICK PUBLISHING CO., ROCHESTER, N. Y.

#### Obituary.

Dr. Joseph Albert Lintner, State Entomologist of New York, died in Rome, Italy, on Thursday, May 5, 1898. Dr. Lintner had been State Entomologist of New York, since 1880, and up to that date, commencing in 1868, he had held the position of curator of the Entomologica! Department of the New York State Museum. He was born in 1822, the son of a Lutheran clergyman, of Schoharie, N. Y.

His attainments in science were solid and accurate, and his abilities were honored by numerous scientific societies at home and abroad. He has done splendid work in a practical way for agriculture and horticulture in this State, and his loss will be seriously felt. He was of a genial and beautiful disposition, and his death will be mourned by many sincere and devoted personal friends.

### A Rose Number-Acknowledgment.

The fact that the present issue of this periodical is very largely occupied with the rose will, it is thought, be a source of gratification to our readers, for there is so much in connection with this regal plant, and so many features present themselves with advancing time, that there is always much to be told and much that is needed to be learned. The beautiful engraving of the rose, Marchioness of Londonderry, is presented through the kindness of the loan of the engraving by Ellwanger & Barry, of the Mount Hope Nurseries, of this city, in whose catalogue it appears.

#### Shading a Greenhouse.

A writer in the Florist's Review describes as follows, a method of shading which has proved the most satisfactory of all those he has tried: For a shade that is wanted to last well on the glass, mix one gallon of buttermilk, one gallon of water and a two-inch pot full of clay and apply to the glass with a whitewash brush. It will hold to the glass all summer

if desired. The above proportions are for a light shade. If a heavier shade is wanted, add a larger proportion of clay. A three-inch pot full of clay to the given quantities of buttermilk and water will make a fairly heavy shade, and a four-inch pot full will make as heavy a shade as will ever be needed. If the shade is not desired to remain long use less buttermilk. For a very light shade buttermilk and water alone answer admirably. One excellent feature about this shading is that it can be easily and quickly removed when desired. All that is necessary is to wet it and it can then be quickly rubbed off with a brush, though it is not washed off by rains.

#### Greenhouse Management.

This is the title of a volume which has just appeared from the publishing house of the Orange Judd Co. It is written by L. R. Taft, Professor of Horticulture in the Michigan Agricultural College, and is "a manual for florists and flower lovers on the forcing of flowers, vegetables and fruits in greenhouses, and the propagation and care of house plants." It is beautifully illustrated and printed, and is a work of the highest and most reliable authority on the subjects treated. The details as given of the latest and most improved methods for the cultivation of the principal plants under glass, whether as flowers, fruits or vegetables, and the directions are valuable both to practical commercial gardeners and amateurs. All the principal florists' flowers and house plants; the vegetables, such as lettuce, cucumbers, tomatoes, asparagus, rhubarb, cauliflower, rad-

ishes, carrots, beets, beans, mushrooms and melons; the fruits, grape, strawberry, pear, peach and nectarine, are subjects to which attention is The propagation of plants, and the diseases and the insects infesting them, and their remedies, are duly considered. This is an excellent treatise and will henceforth be a standard authority on greenhouse work. Price \$1.50. \* \*

#### Missouri Botanical Garden.

The Ninth Annual Report of Dr. William Trelease, Director of the Missouri Botanical Garden, has lately been issued. It is an interesting report, having both a scientific and an economic value. "A Revision of the Genus Capsicum, with Especial Reference to Garden Varieties," by H. C. Irish, is particularly valuable as clearing up the obscurities in relation to the numerous garden varieties of Capsicum or Red Pepper. The common as well as the Latin synomyms of varieties are given, and their proper botanical relation indicated. Much of this paper is based on the observations and collected data of Dr. E. Lewis Sturtevant. "In 1892 all of his material bearing on the subject, including many herbarium specimens, drawings, colored plates, and notes, was given to the Missouri Botanical Garden on condition that the genus should receive study, with a view to the ultimate publication of the results in monographic form. All garden varieties which were procurable, fogether with numerous socalled species, have been cultivated at the Garden for four years, furnishing valuable material in the prosecution of the work." Twenty-one of the fifty lithographic plates in the Report represent the peppers.

Some of the other papers included in this report are A Revision of American Lemnaceæ Occurring North of Mexico, by Charles Henry Thompson, Notes on Salix longipes, by N. M. Glatfelter, M. D., and others by Albert S. Hitchcock, J. N. Rose, J. B. S. Norton, Henry Willis, and Dr. William Trelease. Altogether a valuable report, and a

handsome volume, finely illustrated.

#### Agricultural and Horticultural Publications.

The following bulletins, circulars, etc. have been received which are of particular value and interest. From the U.S. Department of Agriculture, Farmers' Bulletin, No. 70, The Principal Insect Enemies of the Grape, by C. L. Marlatt, M. S.; reprinted from the Year Book of 1895. Farmers' Bulletin No. 72, Cattle Ranges of the Southwest, by H. L. Bentley. Farmers' bulletin, No. 73, a number of interesting subjects. Farmers Bulletin, No. 75, The Grain Smuts: How They Are Caused and How to Prevent Them, by Walter T. Swingle. Bulletin No. 12, New Series. Division of Entomology, The San José Scale in 1896 and 1897, by L. O. Howard. Circular No. 29, First Series, Division of Entomology, The Fruit-Tree Bark-Beetle, by F. H. Chittenden. Circular No. 14, Division of Botany, Dodders Infesting Clover and Alfalfa. Bulletin No. 16. Revised Edition, Division of Botany, American Ginseng: Its Commercial History, Protection and Cultivation, by George V. Nash. Circular No. 30, Office of Road Inquiry, Repairs of Macadam Roads, by E. G. Harrison, C. E.

From the New York Agricultural Experiment Station, at Geneva, N. Y. have been received the following; Popular Editions of Bulletins, Nos. 127, 128, Notes on Small Fruits Grown in 1897; No. 130, A New Disease of Sweet Corn; No. 131, Oat Smut and New Preventives; No. 133, The Best Remedy for Gooseberry Mildew; No. 136, Nursery Stock Pests and Their Repression; 137, Profitable Potato Fertilizing; No. 138, Work Upon Some Diseases of Plants in 1897; No. 139, Combating Plant Lice; No. 140, Wood Ashes Not an Apple Scale Preventive. Also the following: Bulletin No. 133; Spraying in 1897 to Prevent Gooseberry Mildew; No. 134, Report of Analysis of Commercial Fertilizers for the Fall of 1897; No. 135, The Composition and Production of Sugar Beets; and No. 142, Director's Report for 1897.

Bulletins from the Cornell University Agricultural Experiment Station, Ithaca, N. Y., No. 142, The Codlin Moth; No 143, Sugar Beet Investigations; No. 144, Notes on Spraying, and on the San José Scale; No. 145, Some Important Pear Diseases; No. 146, Extension Work.

From other states have been received bulletins as follows: Connecticut, No. 125, Preparation and Application of Fungicides. Ohio, No. 84, No. 125, Preparation and Application of Fungicides. Ohio, No. 84, Sixteenth Annual Report; No. 89, Prevalent Diseases of Cucumbers, Melons and Tomatoes; No. 90, Sugar Beet Investigation in 1897. Hatch Experiment-station, Massachusetts, No. 52, Variety Tests of Fruits, Spraying Calendar. Mississippi, No. 44, Winter Pasture; No. 46, Experiments, with Small Fruits. Maryland, No. 54, Tomatoes. Nevada, No. 34, Drinking Water; No. 45, Hops; No. 36, Some Common Injurious Insects of Western Nevada. Kentucky, No. 72, Potatoes; Experiments with Fertilizers, Corrosive Sublimate and Sulphur for Potato Scabin 1896, and Corrosive Sublimate for Potato Scab in 1897: No. 72. in 1896, and Corrosive Sublimate for Potato Scab in 1897; No. 73; Strawberries. New Hampshire, No. 51, Sweet Corn for New Hampshire; No. 52, Growing Muskmelons in the North.

# \*

In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, and to publish the experiences of our readers. 

#### Double Hawthorne.

When I was in Rochester in May of last year I saw some trees of the red double hawthorne on the site of St. Paul's Episcopal Church, which used to belong to James Vick. Where can I get one of these trees?

The time for moving Hawthorns is in October or April. October is preferable usually. James Vicks Sons supply these trees when called for.

#### Hotbed and Coldframe.

Will you tell me through the MAGAZINE the exact process of constructing both a hotbed and a coldframe, and how long should one wait after making the hotbed before seeds or cuttings are put therein?

The particulars of making a hotbed were given in the February number of this journal, pages 57 and 58.

A coldframe is merely a frame set on the ground and covered with sash to be used later in the season than the hotbed.

#### Bulbs after Blooming.

Will you inform me through the Letter Box how to treat Easter lilies, hyacinths and Roman hyacinths when they have done blooming, and which have been kept in the house through the winter?

Also the treatment of the common calla and Little Gem calla; shall I keep them growing or give them a period of rest? MRS. L. W. C.

The proper course is to turn these bulbs into the garden in the spring, and leave them there. After they have once bloomed in the house, they will not, as a rule, again give satisfactory results if employed in the same manner the next season. New, strong bulbs should be used for potting, if the best results are desired.

The callas can be turned out of their pots into the open ground and so be left until September. Then lift and pot them in rich soil.

#### Violet Culture.

I wrote you last year asking for information concerning the culture of violets as a business, and received from you "Practical Garden Points," in which is a treatise on the violet and suggestions as to coldframes. I carefully read the same, though as yet I have undertaken no definite plans in the matter. I wish, however, to continue my investigation of the subject and I desire to know if you can give me a few further points. Is a hothouse above ground, heated by pipes, the best for successfully raising violets, or do you consider they can be raised just as well in the six-foot excavation described in the pamphlet mentioned? It has been suggested that the house heated with pipes is the most practical. If this is so, then I would like some points on the construction of such a house. Have you a book on this subject? I would like particularly to know about the heating and the construction generally to insure success.

J. A. T.

The desired information will be found in detail in the new book, Greenhouse Management, by L. R. Taft, advertised in our pages this month.

#### Calceolaria .- Putting out Rambler Roses.

I bought a calceolaria, Golden Queen, of you this spring, with several other plants, and it is giving me a little trouble already. I have good soil and the plant grows all right, but the leaves, after they are three or four days old, begin to get black and dry on the ends. I sprinkle it every morning. The temperature of the room is 60° to 65°. I used sulpho-tobacco soap, but it did no good. Will it hurt the plant to pinch it back a little?

Is it safe to put Rambler roses outside now?

Sulpho-tobacco soap is of no use in this case. The trouble is the dryness of the atmosphere, and perhaps some coal-gas in the air. The calceolaria should have a place in a greenhouse, a conservatory, a coldframe, or if in a window, it should be in one that is enclosed or cut off from the air of the room.

Rambler roses that have been raised in the greenhouse can be gradually hardened off in the spring and will then be ready to put out in the open ground quite early, or soon after garden roses begin to show leaves.

#### Potting Soil .- Marguerite Carnations .- Book on Flower Growing .-Moving Narcissus.

r-I see that in preparing soil for potting, cow manure is nearly always mentioned. We do not live where it is convenient to obtain this; will that from horse

stables answer, and if so, in what proportion?

2—What treatment do the Marguerite carnations require through the summer to prepare them for winter blooming? Do they need large pots? 3—I wish to learn to cultivate flowers for profit as well as pleasure, books would be best to aid me in this?

4—In resetting daffodil and narcissus bulbs they have failed to bloom for several years after the removal. I would like to know how to manage them so that they would be likely to bloom, as they are where I want them to remain. MRS. E. H. R.

Hart, Mich. 1 - Stable manure is quite suitable when well rotted. The quantity to use depends on what plants it is for, some requiring much richer soil than others. A soil of moderate fertility may consist of about three parts of good loam and one part each of leaf mold, sand and rotted manure. A soil thus composed can be kept on hand as a standard potting soil. If it it is required to be richer, add more manure.

2 - Everything should be done to obtain a strong, healthy growth of the plants; enrich the soil and give good cultivation, About the first of October, lift the plants and pot them, using pots sufficiently large to take in the roots. Later, when the soil in these pots become filled with roots, shift the plants into pots a size or two larger.

3 - Greenhouse Management, by L. R. Taft, is particularly advised.

4- The only reason the bulbs fail to bloom after removal must be because they are not strong enough. Grown together for some years in a clump, a few of the strong bulbs bloom, but many small ones fail to do so. When these are taken up, separated and reset, it is noticed that only a few bloom, but the blooming ones are as numerous, probably, in one case as the other; after removal the failure of the small bulbs to bloom is noticed, as it would not be if they had not been disturbed.

#### VICK'S CAPRICE AT NEW ORLEANS.

THE spring flower show of the Crescent City closed on April 3rd, amid a blaze of glory. The artificial amid a blaze of glory. The exhibitors were triumphant; amateurs and florists alike, were fully gratified with results. The display of flowers was grand, and afforded an opportunity to judge of the merits of different kinds. No unworthy specimen could stand the forcible comparison with so many that were perfect, and a flower that sustained a fine reputation in this exhibition was, obviously, very fine, indeed, a perfect flower. The roses were so lovely, and of such choice varieties, that decisions were not easy to make. There was elegant simplicity, and classic perfection; there was queenly grace and superb form, and fragrance among cut roses, and those in pots in full bloom. All these graces the roses had in common, but Vick's Caprice appeared particularly prominent. There were potted specimens of this variety of large size and great vigor, loaded with buds and blooms, and there were cut flowers with stems from one to three feet in length.

In regard to the colors that are blended in this one fine rose, probably no two persons would use synomymous terms. Art and nature seem to have combined and woven rich, soft and alluring tints over the thick, leathery, sweet-scented petals, in hues that I would call a clear, sating rose as the ground color and this is distinctly striped and dashed with carmine and white. These variegated colors are uncommon in a rose, and have, do now, and probably will, always cause Vick's Caprice to be classed with the unique and novel; but aside from the unusual tints that variegate it, the bloom is of great merit for its form. Large, double and well-formed, somewhat cup-shaped, with broad outer petals turning gracefully backward, and the buds are exquisite. The offspring of the celebrated Archiduchesse d'Autriche, it is a Hybrid Perpetual, with all the strength and hardiness of that class, but in the South, its freedom of bloom, its shining, bright green foliage, long clean stems, give it marked resemblance of the Teas, and the size and substance of the buds and blooms seem characteristic of the ever-beautiful Hybrid Teas.

Amateurs and florists succeed remarkably well with Vick's Caprice in New Orleans; or probably it is a fact that the rose itself never fails to do well, no matter who undertakes its culture, nor where it may be located. It has no likeness among roses; Madame de Watteville, Child's Jewel and Luciole, as well as others, that combine contrasting colors, are in no wise like Vick's Caprice, therefore in bold, healthful growth, crowned with variegated blooms, it is unmistakable, at a glance, among all other roses, a fact the New Orleans flower show has just demonstrated. Mrs. G. T. Drennan.

#### PLANT FOOD.

Many plant growers are unable to procure all the stable manure needed for their plants and garden and field crops. Many others have also found that it is more economical to use commercial fertilizer, and more satisfac-As these fertilizers are now sold under guartory results are obtained. anteed analysis, the purchaser may know quite surely what he is getting in any particular brand. Besides, the general reputation that a particular fertilizer, or a particular establishment, has gained after repeated trials for years, in actual field or garden use, is an indication of trustworthiness of no small worth. In this respect, a very enviable reputation is now borne by the Walker Fertilizer Co., of Clifton Springs, N. Y., and the analyses of their different brands of fertilizers, as published by the N. Y. Agricultural Experiment Station, at Geneva, N. Y., show that their claims are warranted by the closest scientific examination. They supply fertilizers, varying in composition for different classes of plants, as for cabbage, hops and tobacco, onions, potatoes, wheat, and others, also the Excelsion Brand for pot plants and garden flowers. We can speak from personal experience, based on a careful trial, of the sterling merit of Excelsion Brand plant food.



1 20 W RODE TREE

# HOW TO TRAIN THE RAMBLERS. ESIDES training climbing roses on walls and about verandas and

porches, as most frequently seen, and where they are displayed to fine advantage, they may also be put to other uses. A few diagrams and engravings are here presented, showing different ways of training.

A low trellis may be made with posts and wire. The posts can stand four feet above ground, and be furnished with three lengths of wire—one along the top, one about fifteen inches from the ground, and the other equally distant from the upper and lower one. If the posts are six feet apart, a strong plant of the Crimson Rambler will fully occupy three spaces between the posts, or eighteen feet in length with one or more canes to each wire. The wire should be about number twelve in size and be drawn tight and fastened to the posts by means of staples, in the same manner as grape trellises. The trellis can run along by a garden path and be of any desired length. Not only what are called the Rambler roses, but our hardy Baltimore Belle, Queen of the Prairie, and other hardy climbers, and at the South, the Ayrshire, Banksia, and the Noisette and Climbing Teas can be managed in the same way.

Another way of training may be simply about a post—making what is called a pillar rose. A post from ten to eighteen feet high, securely set in the ground, with a vigorous plant at its foot, may soon be covered from bottom to top with good bearing rose wood; the stems as they grow can be wound about and fastened to the pole. Each year they will extend until a high pole may be furnished. A modification of the pole or pillar rose is a tree form with a broad, circular, umbrella-like head. The diagram showing an upright pole and three cross sticks at the top, indicates the simple construction that may be needed to produce the tree or umbrella form. The top part can be securely fastened to the pole with a bolt downward and then be braced with wire.

The cone or pyramid is another form which climbing roses may be made to assume. The frame-work may consist of three or four poles



ROSE TREE OR UMBRELLA.

set in the ground and fastened together at the top, and having a wire wound spirally around them from the base to the apex and fastened with a staple at each point of contact. About four plants would soon cover a twelve-foot pyramid.

A circular arbor is another form that may easily be made. The arbor can have but one opening or doorway, or it may have two opposite to each other, thus affording a passageway through. In the latter case it might stand over a garden walk and be a modification of an arch. As shown by the diagram, the foundation or frame-work of such an arbor may be easily made by means of iron rods and wire. Some three-eighth inch iron rods can serve as uprights and number twelve wire to go around horizontally; the iron to be fastened together by means of fine copper wire. Still another way of training may be as a simple arch over a pathway or a succession of arches.

Roses of different colors can be trained on the same skeleton, giving variety at the time of blooming. The enrichment of our gardens by the hardy Rambler roses awakens a desire to use them in various ways, some of which have here been indicated.



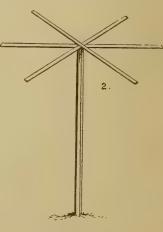
#### NOTES.

READ somewhere that it is not yet known whether the California violet is really hardy or not. The plant I set in the spring of 1897 has come through in fine shape, evergreen in fact, and though the winter just ended has been very mild, I have lots of faith in its hardiness, especially if set where snow can drift over it. The plant already growing when it came, made a few leaves, but ceased to grow as the dry weather came on. When the fall rains began it started to grow again, and was growing fast when winter set in; I almost thought it had grown under the snow, when I first saw it this spring. March was very mild and spring-like here, on the 26th I noticed its flower-buds were formed and the purple petals were peeping out of the calyx. It would have flowered in a few days had the weather remained warm, but April was of different mind; snow began to fall and we had a winter landscape again. So it was not until April 17th that it bloomed, along with the daffodil. It is already plain that like the pansy and all our native wood violets, coolness and moisture are grateful to it, while it dislikes heat and drouth. It is a lovely flower of a dark violet tint, with a strong fragrance like that of the European sweet violet, V. odorata. It takes so kindly to my soil that I have hopes of raising it from seed and naturalizing it along the woodside.

The gold flower, Hypericum Moserianum, has also wintered nicely.

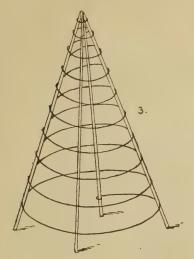
I thought for a while it was going to be evergreen like our naturalized St. John's wort, Hypericum perforatum, and a few half open leaves near the ground remained green but the rest died finally. New growth is now beginning again and it will be larger no doubt this year than last (its first season with me).

I have always been told that tulips, crocuses, hyacinths, etc., might be taken up in summer and planted again in fall, not only without injury but with actual benefit, arising from freshly prepared soil, the division of crowded clumps, etc., but begin to doubt it. Here is a lot of crocus set some years ago, a perfect mat of flowers for a long time now, while



FRAME-WORK FOR ROSE TREE.

the crocus I set last fall is not yet in sight. The tulips, allowed to remain where they grew last year, came up under the snow, while those set



FRAME-WORK FOR A ROSE PYRAMID.

last fall are just now peeping up, a month later, and the same with the hyacinth. It certainly seems to me that these plants object to being yanked out and reset, as much as does any herbaceous perennial. If not, why 'are they so much later? You may say that those set last were put in deeper, but I think not very much. Though tops and roots die off completely, may it not be, that to keep them dry for a time, makes them lose so much by evaporation that their growth is made slow in consequence? Neither did I know that tulip offsets will become bloombulbs with one year's growth. But they will. Many of my tulips set in the fall of 1896 will have two flower this year, besides lots of singleleaved offsets; they will soon cover the ground. There is a contrast between their present luxuriance and the lanky growth of last year.

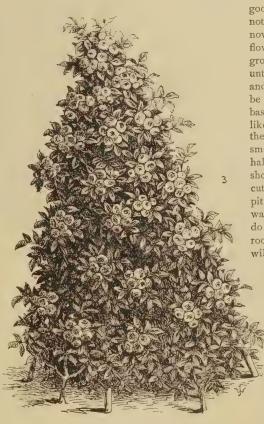
How many have had any success with the Buffalo Berry, so wide advertised a few years ago as a new small fruit plant? I set two plants which grew very nicely at first. Then the bark loosened at the root of one of them, and it died, while the other looks rather dubious this spring. I fear the climate of Western New York does not suit it very well. My living bush is now in flower. Four of the little yellow blossoms put together might be as big as a pin head. So it :amounts to nothing in this way, but it is a pretty shrub with its white shoots and thick, smooth, sage-green leaves which are white beneath. Some dealers sell single plants as if it was perfect flowered, but the males and females are on different plants, and you never will gather ripe fruit from a single bush. I never heard anyone speak of the Columbian raspberry as an ornamental plant, but last fall, when its great canes, bending with a rich burden of foliage turned such a bright, glowing red, it certainly was a thing of beauty. After a time, nearly a month later than the Cuthberts close by, its leaves fell, and then its stems were redder than ever. This fiery tint and its majestic size will make long rows or large plats very conspicious in winter; the passerby will begin to wonder from afar what is making such a display of red. There was no fading till spring came, and then it became a dirty, reddish yellow. But every bud is now starting into vigorous growth and the new canes will be green all summer.

E. S. GILBERT.

Canaseraga, N. Y.

#### SOME BEAUTIFUL CLIMBERS.

One of the finest vines we have for general cultivation is Passiflora Constance Elliott. The foliage is so beautiful that the plant might advantageously be grown for the sake of that alone. The five-fingered leaves are of a shining dark green, and are airily borne on long, slender stems. The flowers are pure white, large, and very beautiful. Constance Elliott is a much better bloomer than any of the older varieties. The plants grow very rapidly when planted in the open ground, attaining a height of fifteen feet during the first season. They require a sunny situation and a rich soil. Give the vines something to climb on as soon as they are set out, and beyond a little training now and then as they grow, and an occasional watering, they will require little further care. The vines are not hardy in the North. They should be taken up at the approach of cold weather, planted in a large pot or box, and wintered in the cellar.



A ROSE PYRAMID.

In the spring the vine should be cut down to within a few inches of the root, which will soon sprout, and the vine will grow the faster for its severe pruning.

Swainsonia alba is comparatively a new plant, but since its introduction a few years ago it has made rapid strides towards popularity. flowers are large, pure white, and greatly resemble a sweet pea blosssom. The crowning glory of the vine, however, is its foliage, which is fern-like, of a rich, dark green, and borne profusely. At the axils of the leaves, the clusters of flowers appear, making a vine which for quick growth and beauty it would be hard to equal. The foliage is excellent for boquets, as it combines well with hearly all flowers; many florists use it in cut flower work. The Swainsonia is very easy to grow. It is a tender plant and should not be bedded in the open ground until all danger from frost is past. It requires a moderately rich soil and a sunny situation. It

will begin to bloom in a short time after planting and will blossom throughout the summer. It is also an excellent winter bloomer. A red variety has now been put upon the market. While it will never attain the popularity which the white variety now enjoys, it is well worthy of cultivation. A charming effect is obtained by planting the two varieties side by side.

Jasminum grandiflorum is another rapid-growing vine. The foliage is graceful and pretty; the flowers are pure white and borne in clusters. They are very fragrant. This jasmine is excellent for house culture and also for the open ground. Its general culture is the same as that outlined for the Passiflora.

LAWRENCE D. FOGG.

\*\*

## PROPAGATING BEGONIA GLOIRE DE LORRAINE.

The only thing is to wait patiently until good cuttings can be had. This will probably not be until late in the spring. Plants cut back now (early in February) will be almost sure to flower again before they will make suitable growths for cuttings. It is better to leave them until they have exhausted their flowering season and cut them back later. The cuttings should be taken as soon as the young shoots from the base are from one inch to two inches long. I like the very short cuttings taken off close to the old stem. These may be put in singly into small pots, or about a dozen into a four and a half inch pot, using light sandy compost, which should be moistened just sufficiently to keep the cuttings fresh, placed in the close propagating pit and shaded. They should have very little water until well calloused, and, provided they do not start damping, there is little difficulty in rooting them. Cuttings from flowering shoots will root, but they will not branch out unless

taken off below where the first flowers appear. This applies to all of the fibrous-rooted begonias, but there are few so difficult to get cuttings of without bloom.

Gloire de Sceaux must be cut back below where it has flowered to get it to branch out and make good cuttings.—A., in The Garden.

CLEAN CULTURE.—Clean culture must be the practice in the garden to secure either good flowers, good vegetables, or good fruit. Frequent stirring of the soil prevents rapid evaporation of moisture below the first few inches and retains it for the benefit of the plants

# APPETITE--STRENGTH

## Without the First You Cannot Have the Last.

Hood's Sarsaparilla gives both. It gently tones and strengthens the stomach and gives digestive power, creates an appetite and invigorates the whole system. By making the blood rich and pure it strengthens the nerves and gives refreshing sleep. It cures that tired feeling and conquers scrofula, salt rheum, boils, humors, eruptions, and all diseases caused or promoted by impure blood.

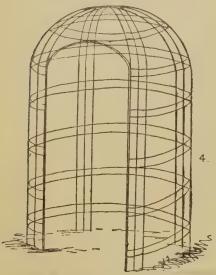
## Hood's Sarsaparilla

Is America's Greatest Medicine. \$1; six for \$5.

Hood's Pills act easily, promptly, and effec-



O! stay, sweet June.
The strawberry easily is king.
For fall pansies sow the seed now.
Cut asparagus only until peas come in.



FRAME FOR A ROSE ARBOR OR BOWER.

It is better that new strawberry beds do not bear.

When the delights of flowering June so impress the minds of all, that is just the best



time to suggest to your friends their need of the MAGAZINE. Usually people gladly subscribe at any season, but at this season they are sure to be garden enthusiasts. The MAGAZINE will make enthusiasm perennial.

Young bean plants transplant easily, a hint that if the rows are irregular, being too close here and having gaps there, the fault may easily be corrected. It is better that the dwarf varieties do not stand closer than three inches in the row, while for stronger kinds the plants should have six or eight inches of space.

The Lily Disease. Mr. George D. Clark, a prominent florist of Philadelphia, reports the successful use of carbolic acid solution in killing the mites that cause lily disease. One-fourth ounce of carbolic acid is put into a quart of of water and thoroughly stirred. The treatment of the bulbs consist in merely immersing them in the solution for a few minutes and then drying before planting.

Trailing Arbutus. The Indians of Cattaraguus county N. Y., drive quite a sale every spring in flowers of the much-prized trailing arbutus. The blossoms are tied in pretty little bouquets and are peddled out at five or ten cents each, in the villages and cities of Western New York. The arbutus is a flower that can never become very common, fer the reason that it does not bear successful transplanting. It is indeed a mark of high skill as a gardener, to be

able to transfer it and make it succeed out of its native habitats.

As to weeds, a hoe-stroke in June will save nine later on.

No operation in the garden pays better than to evenly thin out the rows of seedlings.

Sometimes young plants from last year's seeding are permitted to spring up in the asparagus bed. Look out for such just now and treat as weeds.

Sour cherry catsup. Any reader who will try my receipe, as follows, will be sure to be pleased: Cherry juice one quart, into which stir a pound of sugar, two teaspoonfuls of cloves, two of cinnamon, and a very little cayenne pepper. Boil until thick, and bottle.—L. E., Delaware Co., N. Y.

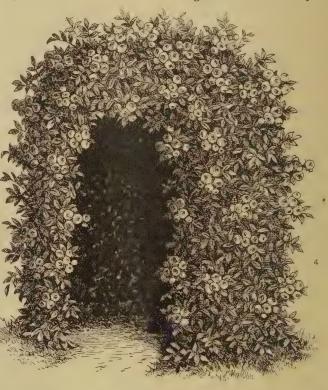
Gardening for pleasure. My home is situated thirty-five minutes ride by train from town where I am engaged in business. My grounds comprise thirteen acres, about one-third of which is devoted to a grove and lawn near the dwelling, the balance to fruit, vegetables and farm crops. One man is employed on the place the year round. I myself work in the garden about one hour daily, and this affords me a large amount of pleasure as well as relaxation from the cares of the city desk. Strange as it may seem to some, my favorite work is weeding the beds of flowers, vegetables, etc. Where the pleasure comes in is in this way: I anticipate weeds by keeping the soil so thoroughly tilled that rarely does a weed get above half an inch in height.

# Cen-Pep-Ko DIAMONDS

Something new. The greatest thing in the world for Stomach, Nerves, Throat and Breath. Your druggist, or send 5 cents for trial package.

The Diamonds Co., Rochester, N.Y.

This means that handling the hoe is only equivalent to so much delightful exercise in the open



A ROSE BOWER.

air. By this course of clean tillage, I come im close contact with, flowers, plants, shrubs, vegetables and fruits throughout the place, and thus enjoy every minute of my time in the garden. Frequently the pruning shears, or the note book and pencil, are called into use as I till around the plants. And then there is a reward, which gives joy to every gardener, namely, clean, well-kept borders and beds. A clean, well-tilled border or garden patch delights the eye even though nothing is growing therein. I pity my business friends, who do not know the pleasure, and recreation, and the better-stocked table that come from owning and managing an ample-sized garden.—A. H. E.

#### Discoloration of Flowers.

The last issue of *The Microscope* contains the following paragraph in relation to the subject named:

The discoloration of flowers and algae on drying is attributed to atmospheric ammonia. To counteract its injurious effect, Nieuhaus has used pressing paper previously saturated with a one per cent. of oxalic acid solution, and dried, obtaining in this way beautiful specimens of some of the most difficult flowers to preserve unchanged.

S. M. Bowles is reliable. See ad.

However blue the smiling skies, However soft the breeze. The rising teardrops dim my eyes On summer days like these When through the garden paths I go, Or down the sunny glade, While every step but serves to show How fast the roses fade.

My bridal blossoms withered lie, he Damask blooms no more While every breeze that ripples by
Has caught a fragrant store Of petals soft, 'till everywhere A fragrant sheet is laid; But yester-eve I left them fair, So soon the roses fade.

O, bushes sighing beauty-reft, O, garden fair no more. One precious hope to us is left; Ye bore such royal store, That, in the halls of Memory bright, Your beauty and perfume
Shall live undimmed 'till, pink and white, Again the roses bloom.

- LALIA MITCHELL.

#### INSECTS AND A SPRAYER.

Sometimes in the heart of the summer you find yourself strolling about, looking at the various plants, noting the progress they have made, when all at once you are startled because of various pests which have taken possession of this vine or that shrub; your vexation grows as you proceed, - examining rose bushes, and, finally, extending your observation to the trees on the lawn, you find that the enemy is in full possession. The honeysuckle vine is covered with aphides, except on the older branches, which are full of great fat worms that are improving every minute, gormandizing at the expense of the vine; the aphides have found their way into the very unfolding buds and the plant will succumb unless something is done, and that promptly.

The tender parts of the branches are likewise being destroyed; the elm trees harbor caterpillar nests; the black aphides are a sight to behold

Leather Dressing Lengthens the life of leather-acts as a preservative as well as a polish. Keeps a new shoe from looking old-makes an old shoe look new. The result of many years' study of leather pecu-liarities. For men's, women's, and children's shoes. Sold by all dealers. Made by the makers of the famous Vici Kid, famous for its durability and softness wherever shoes are worn. An illustrated book about the wear and care of shoes mailed free. Robert H. Foerderer, Philadelphia, Pa.

HOW SOON THE ROSES FADE! on the young cherry trees - and all this on a well kept lawn! The remedy of course for such a situation and dire condition of things is to procure a sprayer and rout the enemy!

> I speak from experience - for last summer these pests came unaware and took up their abiding place on vine and shrub, bush and tree. I sent for a sprayer and I suppose a great deal of cruelty to animals followed, for the sprayer was used frequently and the insect pests were quite effectually cleared away.

> This season the sprayer will be used in time to prevent any wholesale possession. It has been at work already in fact, according to the old adage "that an ounce of prevention is worth a pound of cure." Forewarned, one should be forearmed; it is a good thing to invest in a sprayer, even a very small one is worth a great deal in a case of emergency. There is nothing more vexatious than to find one's choice plants being ruined by various pests which by watchful care and prompt action can be over-MRS. W. A. K.

#### \* \* FEEDING CHRYSANTHEMUMS

Many mistakes are made among amateurs in feeding chrysanthemum plants. We are often told that the plants are gross feeders, and so they are, but great care is necessary in determining the time for feeding, as well as the amount given. Rank growing plants are not the ones from which to expect the finest flowers, as it is then evident that the plants have been overfed; it is not that they require the extra fertilizer for their own growth, but to properly develope the flower buds. All along through the growing season, up to the time the flower buds appear, the less fertilizer given the plants the better the results will be, provided always that the plants have been potted in good soil to begin with. All they require is enough to keep them in a healthy, growing condition, and this is furnished by the new earth given in the frequent shiftings the plants receive. When the buds begin to form, let the feeding commence, varying the fertilizer used if possible, giving a manure water made from sheep, cow,

and horse manure at different times, then occasionally for several days withhold all, and water with clear water. If the plants seem to grow too fast, give no fertilizer for a week or two. The wood must be well ripened to produce fine flowers, and if too much fertilizer is given, the wood grows too fast to ripen well, the flowers are small and weak, and the general result is far from satisfactory. A plant too well fertilized will be so long-jointed that it will usually require staking to keep it erect, while a well-grown one is stocky and strong and holds its blossoms erect as easily as a geranium.

LAURA HASTINGS.

#### CYCLAMEN PERSICUM GIGANTEUM

I always believe that it is never too old to learn, and very often indeed I obtain from these pages practical hints on cultivation that far surpass older methods. The early spring is the best time for sowing cyclamen seed; and the best kind of compost for filling the seed-pots or pans is one that consists of fibrous loam two parts, with silver-sand in quantity sufficing to keep the soil porous. The whole of these substances must be passed through a sieve with a one-half-inch mesh. The pans or pots should be filled with clean crocks and some charcoal. Fill firmly to within one inch of the top, make level, and sow thinly broadcast, and just cover the seed with soil, and no more, and over each pot, etc., put a sheet of glass, and place in a warm, moist house, shading from sunshine, but tilting the glass slightly to let moisture escape. The seedlings will appear within a fortnight; and when well above the soil, remove the glass, but afford shade. When large enough, lift very carefully, and pot into 60's (three inch); pot firm, and keep the corms just above the surface, using a mixture of the same compost as before stated. Always put good drainage. Grow on in an ordinary greenhouse on a shelf close to the glass, and well shaded.

Place the plants when well established, about the second week in June, in a cold frame, raising them near the glass, shading them and affording plenty of air, the lights being pulled off at



A ROSE ARCH

night in fine weather. When the pots are filled with roots shift into 48's (four and one-halfinch) mixing a small quantity of artificial manure with the soil, and when well established afford liquid manure twice a week, finally shifting them into the greenhouse. When the flower-buds appear, examine closely for thrips, and if any are seen apply tobacco powder. After flowering, rest the plants in a cold frame, and in August shake the tubers out of the soil, cut off decayed roots, and repot into 48's (four and one-half), the largest bulbs into 32's (six inches), and grow on as before recommended for seedlings .- J. S., in The Gardeners' Chronicle.

WOMEN'S Bicycle Skirts. All wool, men's fabrics. Send for samples. A. W. WEBBER, Syracuse, N. Y.

BIOYCLE FREE for the season to agents; write for particulars. EARN A BIOYOLE and make money by a little work in your looslity. Special proposition to early applicants.

COOK OYCLE CO., 69 Fourth Ave., CHICAGO.

Young men or ladies to learn telegraphy and railroad book-keeping. This school is acknowledged superior to any other, by leading railway companies. We place all graduates. MORSE SCHOOL OF TELEGRAPHY. Oshkosli, Wisconsin.



## **Armed Intervention**

is not necessary to the peace of stock or safety of crops about which Page Fence is erected.. PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

## The Great Round World



Send 25 cents for trial subscription of six numbers, with Great Round World Reference Atlas. FREE if you mention Vicks Magazine.

The weekly newspaper for the Boys and Girls, and grown-up people, too. ....

The Great Round World Pub. Co. 5 West 18th St., New York City

\* \* \* \* \* \* \* \* \* \*

#### USE IT FREE

30 days in your own home before paying one cent in advance; shipped anywhere, to anyone, for 30 days' test trial. We risk you, 460 White Star Machine, \$22.00 \$50 Pearl Machine, \$12.50, 16.00 Standard Singers, \$3, \$12.50, 16.00 Full set of attachments free; buy from factory and save \$10 to \$40, WE PAY FREIGHT; thousands in use; catalog, showing 20 other style free. Each machine guaranteed 10 years.

free. Each machine guaranteed 10 years.
Consolidated Wholesale Supply Co.
Dept. 47 215 S. Clinton St., Chicago, III.

## Life! Life! Life!

Cutler's Carbolate of Iodine Pocket Inhaler. Guaranteed to cure CATARRH and Bronchitis. All druggists. By mail \$1.00. Address

W. H. SMITH & CO., Props., Buffalo, N. Y.

## Blindness Prevented.

The Absorption Treatment
A success in treating all forms of diseased eyes
without Knife or Risk.

Over 75,000 treatments given at our institution in '07. Representative people from all parts of United States and Canada endorse this institution.

#### "Do Not Wait to be Blind."

Thousands have everything to gain and nothing to lose. Pamphlet free, describing hometreatment and institution, the largest and most successful in America. THE BEMIS EYE SANITARIUM, GLENS FALLS, NEW YORK.

Chichester's English Diamond Brand.

#### JUNE.

Speed away, winsome May, O'er the fragrant meadow grasses, One more gay comes this way, June, the bright, the lovely, passes.

> Roses fair in her hair, Lilies at her girdle bending; Everywhere, incense rare To the azure skies ascending.

> > Far and near, birdsongs clear Swell anew the merry measure.
> >
> > June is here! June is here!
> >
> > Gracious June, the month of pleasure! LALIA MITCHELL.

#### CANNAS.

A difficulty sometimes experienced, is to keep them safely through the winter, and this is done best by storing the clumps under the benches of greenhouses, on boards raised an inch or so from the ground, to prevent any dampness arising form the bottom. \* \* \* For an amateur who has no greenhouse the best place is the cellar, where frost cannot enter. It is



#### A CITY NOSEGAY.

Living in a city where land of course is very valuable our back yard is not so very much larger than one of grandmother's bedquilts, but I have not been deprived of the pleasure and consolation of flowers, nevertheless.

The wash is put out, and I have neither chickens to scratch nor dogs to worry, so that my fragrant

pets have a chance to grow.

My garden is like a woman's Saratoga. I did not know how much it would hold until its capacity was tested, and even no matter how crowded it seems I can always manage to squeeze in another plant.

A bed about two feet in width completely environs the yard, and there is a central bed, 3x5. Between the latter and the border bed runs a wide path, allowing the freest movement and giving easy access to all the plants.

Never before have I been able to get enough sweet peas—my favorite of all the annuals,—so this year I planted them all around the garden next the fence; these with a grape vine, moon-flower and English



#### CLIMBING ROSES ON A PORCH.

ivy compose my collection of vines. I have eight rosery compose my collection of vines. Thave eight rose-trees, a Jacqueminot, La France, American Beauty, Perle des Jardins, Safrano, Meteor, Louis Phillippe and a yellow, the name of which I do not know. My Jacque is not very satisfactory, the roses fade so quickly, but the LaFrance, Meteor and Safrano bloom continuously all through the summer. Besides these, my garden harbors and cherishes chrysanthemums, gladioli, heliotrope, geraniums, verbenas, pansies, stocks, nasturtiums, dicentra, calliopsis, primroses, August lilies, China asters, oxalis, carnation pinks and phlox; also one each of the following: Hydrangea, manettia vine, sweet alyssum, pelargonium, dahlia, perennial pink, anemone, salvia, tiger lily, several other flowers (names unknown) and an evergreen tree, a species of laurel. The plebeian weed has to look elsewhere for a home, as it has no room to grow in my garden.

S. P. P.

#### MY EVER-BLOOMING ROSES.

"Which of your flowers has given you most pleasure this year?" Before I answered the quespleasure this year?" Before I answered the question I gave a hasty mental glance at the floral procession which began with the year and Roman hyacinths, followed by a succession of Dutch relatives in the house and later out of doors. Then there was the gorgeous display of tulips; a variety of perennials, including the graceful bleeding heart, Columbing peoples leaven tilities and was a lateral and facilities. bine, peonies, lemon lilies and sweet, old-fashioned

important not to shake the earth away from the clumps after digging them up, as this helps to keep the bulbs fresh and plump until spring, protecting them against dry or cold currents of air; they should be placed under the benches very closely, but not in such a way as to bruise the outer bulbs.

Cannas are gross feeders; they are not very particular as to soil, preferring a somewhat heavier to a light one, so long as it is nourish-ing and well drained. During their period of growth they require plenty of water, and a few manurial waterings will be found of service. At the same time, a canna grown in a poorer soil, or in a pot, will stand the winter better than one grown in a heavily manured soil. The practice in Stuttgart is to dig out the bed where practice in Stuttgart is to dig out the bed where it is intended to plant the canna for show, to the depth of one foot or more, filling in with decayed stable manure from hot-beds, etc., which it is intended to clear away, covering again with the soil previously dug out. This not only gives the bed a bold appearance until the cannas have become established, but also affords good drainage .- H. R. W. in Gardeners'

grass pinks. Late May and early June brought the roses in abundance; moss roses and all the host of hybrid perpetuals and climbing roses. July and August had splendid spikes of gladioli, to say nothing of the variety of annuals. September brought asters that almost rivaled the chrysanthemum, and October the graceful cosmos.

And now November and the chrysanthemums are here; great fluffy globes of gold, dark reds that have a touch of yellow on their petals and light up wonderfully in the sunshine, plumy pinks and white flowers that rival the snow in their stainless purity.

But I turn even from my beloved chrysanthemums and answer, "My ever-blooming roses." There are about thirty varieties in my bed, and there has been no day since the middle of May when I could not cut roses from it. Now, November 12th, there are still beautiful roses and many buds in all stages of development. There is, alas! a north wind blowing and by to-morrow roses out of doors will probably

be a thing of the past for this year.

Perhaps the two finest roses in my collection are Maman Cochet and Etiole d Lyon, the former an exquisite pink and the latter usually classed as yellow, though it is scarcely more than a rich cream tint; Viscountess Folkestone, with flesh-colored roses almost as large as peonies; Champion of the World, with its profusion of bloom, Henry Maynadier and Mrs. John Laing, both beautiful pink; Meteor, rich dark red, but not so constant a bloomer as its neighbor Queen's Scarlet; the Queen, pure white, and Marie Lambert, creamy white, are some of the best in this bed.

All that I have named are hardy with slight protection so far as the roots are concerned, and as they bloom on the new wood it does not matter that the

tops frequently winter-kill. 'What are the essentials in rose culture?" For the amateur they are in brief: A bed in a sunny location, deeply dug and well enriched with old manure; firm planting, a rose with the soil left loose about its roots is doomed; frequent cultivation, especially in dry weather, and the removal of all flowers as soon as they fade. To this must be added the winter pro-tection of leaves or evergreen boughs when winter is

Paoli, Ind.

#### THAT FRAUD OF A FLORIST.

That florist and seedsman is a fraud. Who? Why the one to be sure whose catalogue lies before you in beautifully illumined cover, bright without and witching within, with its scores of engravings and bits of fascinating descriptions. It does not make any particular difference whose name is on the catalogue; they are all alike, frauds, for Mrs. Sure-

fail told me so, and she has tried them all.

Mrs. Surefail says they send out good stock to those who will write it up and praise it to the skies, but to other people they send stuff that does not amount to anything. Look at her cannas for instance. She bought Canna Ehemmani, "grand and stately, with luxuriant musa-like foliage," according to the cata-logue, and the commonest seedling would have been good. Star of 1891 died, Florence Vaughan lived long enough to open one flower, then withered away, root and branch, while Madame C10zy was nothing remarkable. It was just so with her other plants, Little Gem calla, Meteor rose, Storm King fuchsia, Swainsonia alba, and the rest. Half of them died and the other half had miserable little flowers, not at

all like those pictured in the catalogue.

True, no doubt. Yet, come to think of it, how did that tricky florist know that Mrs. Surefield did not intend to "write it up?" Surely it was a pennywise and pound foolish policy to send out stock so inferior that she would never want to patronize him again. Perhaps there was some mistake—stay, a thought has just occurred to me: Good gardeners put their cannas and tea roses into bedsmade rich with manure; they loosen the earth about the roots, kill insects if any appear, and give water in time of drouth. Mrs. Surefail set her plants out in a bed so hard that a chicken wouldn't scratch in it; it is the same flower bed that her husband's mother first made thirty years ago. There have been thirty crops of flowers raised in that bed. Each crop took someof flowers raised in that bed. Each crop took some-thing out of the ground, but there has never been anything put back in the way of a fertilizer. It is cruel to doubt a lady's judgment, but might it not be that the fault lay with Mrs. Surefail herself, and that such of her plants as starvation did not kill, neglect finished?

Then there is Mrs. Gadsby, who has quite a collection of house plants. She takes spasmodic fits of zeal in floriculture. She studies the catalogue for a week at a time, then orders every rose and geranium

specialty recommended for winter bloom, to say nothing of quantities of primroses, abutilons, be-gonias, oxalis and justicias, that every single cata-logue emphatically declares are absolutely sure to bloom in winter. She intends that her windows shall be something wonderful in their winter dis-play of flowers. And so she mixes composts and insecticides, and showers and pinches her plants according to the best authorities, and yet she tells me that she might fittingly adopt "Nothing but leaves" as her favorite hymn, for it expresses her experience exactly. Not a bud sometimes for months, then a few blossoms, and then a dearth of flowers again. How can she ever have faith again in those falsifying catalogues?

And yet I remember that last fall when her plants were in that good growing condition that precedes bloom, she went on a three weeks' visit to her mother and placed the plants in the cellar where they would not freeze. In fall and winter is the natural resting time of plants. In the cool, dimly-lighted cellar growth ceased and the plants prepared to sleep, when presto change! they were whisked back into the sunny upper regions again. Alas, for preversity! Those plants sulked and pouted as though they never intended to put forth another leaf or bud. At last they began to unlimber themselves. New shoots appeared and wee flower buds began to un-Then off went Mrs. Gadsby to visit some other relatives and into the cellar went the plants again, and really she felt agrieved upon her return to find every bud blasted and her plants in another fit of the dumps.

There are others who say the florists are frauds. One because his choice roses all died the first season, though to be sure the wee things went unmulched and unwatered through a two months' drouth. Another sighs over his wonderful ever-blooming (?) Otaheite orange that has sulked through eighteen months of existence and put forth not a bud. Its owner says: "Thank heaven, I have never wasted any fussing on the old thing, and never watered it until the leaves began to curl." So the complaints run, and I fancy the seedsman and florist gets the blame that neglect and carelessness ought to bear.

Pineville, Mo.

L. S. L.

#### LIQUID MANURE.

The following directions for preparing a liquid manure are given by the Gardeners' Chronicle:

Put into a forty gallon tank or cistern two bushels of fresh horse dung; stir it well about, and leave it to clear; and in about a week add one peck of fresh soot enclose in a canvas bag, squeezing this a little every third day, so as to make its contents exude. Let the mixture get clear, and then use, say one quart to three gallons of rain or soft water. This is a good manure for all kinds of soft-wooded plants.

It may be made stronger by adding chickens' or pigeons' dung, at the rate of half a peck to the above quantities. If in summertime bubbles generate on the surface, it is a symptom of fermentation, and the latter should be stayed, by the addition of a small quantity of white vitriol. Of course, after the cask has been filled up twice, the contents should be turned out and a fresh lot made up. Instead of clear water, soap-suds may be used in filling up the cask.

#### GOOSEBERRY MILDEW.

The superiority of potassium sulphide as a preventive of gooseberry mildew is clearly shown by experiments discussed in Bulletin No. 133 of the New York Agricultural Experiment Station (Geneva). This fungicide, lysol, formalin, and Bordeaux mixture were tested side by side during 1897 and the potassium sulphide plats not only showed a smaller percentplats not only showed a smaller percentage of mildew injury but yielded a much larger quantity of perfect fruit. The early treatments also proved better than those begun medium early or late. If you are a grower of gooseberries you will do well to send to the station for a copy of the bulletin copy of the bulletin.



The Society Bud

after the fatigue of the season will find a practical doctor in

## MONARCH BICYCLE.

To ride one in the fresh air and sun-shine will bring back

the pretty roses.
For grace of line, easy running and mechanical construction finer bi-cycles impossible.

'98 Monarchs, \$60, were \$100 and still worth it.

Defiance, \$50, \$40, Second only to Monarchs. MONARCH CYCLE MFG. CO., NEW YORK CHICAGO.

SOLD AT FETAIL BY

C. J. CONOLLY, Exchange street, Rochester, N. Y.

Dogs for Sale. Pen Fowls and Chickens.

All varieties of Thoroughbred Sporting, Hunting House and Watch Dogs. Trained, untrained, and pups. Send stamp and state kind wanted.

JAMES BETTIS, Farm Kennels. Winchester, III.

#### WATCH AND CHAIN FOR ONE DAY'S WORK.



Boys and Girls can get a Nickel-Plated Watch, also a Chain and Charm for selling ly doz. Packages of Bluine at 10 cents each. Send your full address by return mail and we will forward the Bluine, post-paid, and a large Premium List. No money required. BLUINE CO. Box 66, Concord Junction, Mass.

THAT CHARMING and popular magazine, year of publication, regular price 35 cents, we will, to intro-duce it, send to any address a whole year for only 10 cents, Addre

S. M. BOWLES, Woodford City, Vermont.

PILES RUDY'S Suppository is guaranteed to cure PILES, and CONSTIPATION (bleeding, itching, protruding, inward), whether of recent or long standing, or money refunded. It gives instant relief, and effects a radical and permanent cure. No surgical operation required. Try it and relief your sufferings. Send for list of testimonials and free sample. Only 50 cts. a box. For sale by druggists, or sent by mail on receipt of price.

MADTIN DUIDY Deer Dharmagist Januagtar Do MARTIN RUDY, Reg. Pharmacist, Lancaster, Pa.

## MATERIAL AT ONE-HALF PRICES.

\*A-\* Cedar Shingles \$1.50 per M. (any quantity)
Wovên Wire Netting, Plain Wire, Barb Wire, Nails
Horseshoes, Horseshoe Nails, Black Iron Piping, Iron
Roofing, Plumbing Material, Wagon Makers' Supplies,
Farmers' Supplies, Contractors' Supplies, Florists'
Supplies, Furniture and Household Goods, every kind
of Merchandise and Supplies. Send for free catalogue
and low prices. Largest depot in the world for
all kinds of second-hand and new material.
CHICACO HOUSEWRECKING CO.
Purchasers of World's Fair Buildings.
35th and Iron St. CHICAGO

35th and Iron St. CHICAGO

PHOTOS 12 for 250; Send any photo with 250 and 2-cent stamp for 12 elegant "Trilby Photos" made from it. Size 2x3in. Original photo ret'd unharmed. Sam-R. Stanton, Box E, Jamestown, Ohio.

RUBBER GOODS of all kinds. Special Novelties. Hazeltine Co., Toledo, Ohio.

## OFFICIAL WAR BOOK

by Murat Halstead, greatest living War correspondent; all about War with Spain, the navy, all battleships. all about War with Spain, the navy, all battleships, Splendid Colortype premiums. Tremendons seller. Biggest money maker ever known. Most liberal terms guaranteed. Agents make \$7 to \$28 per day. Large 50c. War Map free with outfit. Credit given, freight paid, outfit end 6 2-cent stamps for postage

MONROE CO., Dept. L12, 324 Dearborn St., Chicago

#### "Capital A" Skirt Supporter ...

Reeps Skirt, Waist and Belt where they belong. Worn with all kinds of waists and on all seasons, with or without belt. 25c. by mail. Agents wanted. Write for circular. Montauk Mfg. Co., Lima, Ohio.

LLES CURED quickly and permanently by DR. BROWN'S PILE CURE. Used by many physicians in their practice. Price 25 cents.

AT TARRH and the headaches it brings relieved and permanently cured. Hay fever and asthma vanquished by DR. BROWN'S cure. Price 25 cents.

ALD HEADS and gray, faded hair cured. A months' trial 25c. All by mail. Address Brown Med. Co., Dept. X, Youngstown, Ohio.



SIX DOILIES FREE.
For one dime we will send our fashion paper 3 mos. and give free SIX HANDSOME DOILIES, in beautiful designs, ready to work. Right size for use on table, BB JOURNAL CO., Beaver Springs, Pa.

TURKISH, RUSSIAN, Medicated Baths, Renovates your system, cures RHEUMATISM, Asthma, Las Grippe, Neralgia, Eczema, Catarrh, MALARIA, FEMALE ILLS, Blood, Skin, Nerve, LIVEE and KIDNEY Diseases, Beantifies Complexion. Best made. Price very low. WHOLESALE TO AGENTS. HYGIENIG BATH CABINET CO., 607 Church St., NASHYILE, TENN.

## CANCERCURED by absorption. NO PAIN. Home treatment. Send for book. T.M. Clarke, M.D., Rhinebeck, N.Y.

A Rapid Process of Taxidermy at Home,

which all can readily learn. Why pay out \$10 to \$50 for instructions when you can Learn at Home]

for next to no expense. This is the season to mount birds. Write for information, enclos-ing stamp, and mention Vicks Magazine.

Morris Gibbs, M. D., Kalamazoo, Mich.

## Women's Blessing! DR. NORTON'S MEDICATED TAMPON

for Women. The only practicable and original way to apply medicine to cure the diseases of women. Has endorsement of your physician. If you have Leucorrhœa or Falling of the Womb, it will cure you. Four weeks' treatment for \$1.00 mailed, or send stamp for sample. Dept.O.

NORTON REMEDY Co., CHICAGO, Ill.

DYSPEPSIA INDIGESTION,
HEART-BURN
and all Stomach
Troubles quickly relieved and cured by
mail or Druggists. Every drop is worth its
weight in gold when you need it. Address,
Franklin Hart, Dept. F, New York.

When writing to advertisers, mention Vick's Magazine.

LADIES Monthly Regulator. Never fails. Send 4 cents for Woman's Safe Guard. Wilcox Med. Co., Dept. 68, Philadelphia, Pa. When writing to advertisers, mention Vick's Magazine.

#### TRANSPLANTING.

Y seedlings are a great disappointment," said my neighbor. "Tell me your IVL said my neighbor. "Tell me your secret, for your's all live. Never think it possible they can turn up their toes, and give it up!"

"No secret" said I, "just a little knack. I wait until a partly cloudy day, after they are two or three inches high. The bed is covered with soft soil. I lift a clump with my trowel, and choose the most thrifty, throwing the rest away. Some women try to save every one, but I would rather have six perfect plants, than fifty crowded together. Holes are made and the little plants put in, at least a foot apart. Then I bring up the soil around, and pinch it, so as to have a tightly-fitting blanket. This is important, for if the soil is loose, the sun gets at the roots, and the plant is done for. Then I take a fine sprinkler and gently water, and let them alone, a very important rule, for plants dislike too much fussing. Many seedlings, like poppies, hate transplanting, so I thin them out, by pulling up and throwing away many until I get them the right distance apart. All annuals ought to be fed generously, so I put a spoonful or two of bone dust along the lines, mixing it with the soil."

#### GLADIOLUS AND TULIPS.

For many years I have been a hard worker each summer in my flower garden. I neglected my friends, my correspondents and even my own looks. I have dug weeds until my back ached, and freckles and tan made a fright of me, to say nothing of the hundreds of buckets of water I have carried, and the shoes ruined, and dresses draggled.

With all this, I felt more than repaid, for no one in the town had such flowers as I. But for several seasons, failing health has made it impossible for me to give such care to the garden, and in this hot dry climate, nothing will live without care, and much watering. Still I cannot give up my plants, so I have studied to find such plants as will do well without much care, and for show and grand blossoms, the gladiolus stands first. The plants require a rich, deep soil, so the beds are dug two feet deep, and over half of the soil removed. To this is then added about equal parts of sharp sand and well rotted cow manure, and the whole is well mixed. The bulbs are so cheap that any one, almost, can afford a hundred or more of them. I like the mixed seedlings, for then one is constantly being surprised as they bloom, and some are early and others late bloomers.

After planting the bulbs, they should be well watered, and the weeds will come up thick before the plants push out. The weeds will need to be cut out once or twice more, but this can all be done with a narrow long handled hoe, and saves one's back. All the care re-

quired after this is water; and what a delight are the flowers. After the frost kills down the tops, carefully lift the bulbs and let them dry off in some dry place. I place them in grape baskets when dry, and hang them in the cellar where frost and mice cannot get at them. They increase very fast.

Another year I will try a tulip bed, as they are so little trouble. I raised them years ago, and left the bulbs in the ground all winter, but every year I thinned them out and started a new bed or two. They bloom early and then die down, so that one can use the bed for something else. I used to set petunias and geraniums in the bed. They are the loveliest spring flowers and require almost no care at all. Any one who has a permanent home would do well to MAY LEONARD. plant a tulip bed.

Glendive, Montana.

#### RENOVATING THE APPLE TREE.

We have a King of Tompkins County apple tree that bore only small, very gnarly apples, fit only for the pig-yard, where they usually went. One spring, disgusted with the eyesore, I determined to treat it as I had the plum tree for black knot; so taking an old pail into which I put a couple of quarts of soft soap, as much water and a quantity of wood ashes, with an old broom I proceeded to give the tree a liberal coat of the liquid; but the bark was more like that of a shell-bark hickory than an apple, completely protecting the hidden insects from all outward applications.

We hear it said that "when a woman makes up her mind to do a thing she does it." True to the adage I determined to either cure or kill, so bringing the chip basket around, I peeled all the loose bark off and put it in the basket,-all that I could reach with a hoe by climbing into a chair,—then the tree was easily covered with a wash of the soap and ashes and the next day scrubbed off with hot water. Folks said I had killed my apple tree. I did not care, but the next fall it was well loaded with fine luscious E. W. P.

#### CONTENTS.

Agricultural and Horticultural Publications . . . 120 Cannas.... Clean Culture.. Gooseberry Mildew. nsects and a Sprayer.... Insects and a Sprayer.
Letter Box.

Double Hawthorne, Hotbed and Coldframe,
Bulbs after Blooming, Violet Culture, Calceolaria, Putting Out Rambler Roses, Potting
Soil, Marguerite Carnations, Book on Flower
Growing, Moving Narcissus.

Manure, Liquid
Missouri Botanical Garden
Notes.

Notes... Obituary, Dr. Joseph A. Lintner. Plant Food... Poetry — How Soon the Roses Fade . . . June . . . . . Propagating Begonia Gloire de Lorraine . Propagating Begonia Gloire de Lorraine Renovating the Apple Tree Rose, Crimson Rambler Roses for all Summer Roses in Pots Roses, Outdoor Culture of Roses, Outdoor Culture of Roses, Some of the New Seed Pods Shading a Greenhouse Transplanting Vick's Caprice at New Orleans Vick's Caprice at New Orleans



ELKHART CARRIAGE AND HARNESS MFG. CO. W. B. PRATT, Sec'y, ELKHART, IND.